

# PUBLIC HEALTH REPORTS

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## **POLIOMYELITIS (INFANTILE PARALYSIS) SITUATION.**

A statement of the cases of poliomyelitis reported since June 1, 1917, appears in this issue, beginning on page 1283. Up to the first of June the disease had not been reported in unusual prevalence in any locality.

In June an outbreak developed in Washington County, Vt. Up to August 4 there had been reported in the county 57 cases. Many of the cases were in the city of Montpelier, which is in this county.

In Ohio an outbreak was reported in Belmont County, with the principal focus at Martins Ferry.

In West Virginia an outbreak began in July in Marion County, with the principal focus at Monongah.

In Maryland 15 cases were reported in Allegany County between July 15 and August 4.

In Massachusetts 18 cases were reported between June 1 and August 4 at Haverhill, a city of 44,115 population.

In Minnesota seven cases were reported in Blue Mounds Township, Pope County, between July 22 and 28.

In Virginia 22 cases were reported during July in Rockingham County.

These are the only localities in which it can be said that outbreaks have occurred. For the most part the localities involved have had a comparatively small population and altogether the number of cases has not been large. While cases of the disease have been reported in small numbers from most parts of the country, this can not be considered other than usual.

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## **TYPHOID FEVER AT NASHVILLE, TENN.**

There appears to be an undue prevalence of typhoid fever at Nashville, Tenn., the number of cases reported during the five weeks ended August 4 being 7, 10, 40, 24, and 40, respectively.

**EXTRA CANTONMENT ZONE REGULATIONS.****REGULATIONS GOVERNING THE SALE OF FOOD AND DRINK IN THE SPECIAL SANITARY ZONE AROUND CAMP PIKE, NEAR LITTLE ROCK, ARK.**

The State Board of Health of Arkansas, on July 24, 1917, adopted the following regulations "governing the establishment and conduct of all food and drink stands in the special sanitary zone around the Twelfth Division Army Camp."

SECTION 1. The word person used in these regulations shall be construed to include and mean the word person, firm or society, association, copartnership, corporation, or individual.

SEC. 2. The word food used in these regulations shall include all articles used by man for food; food products, drink, liquor, confectionery, condiment, whether simple, mixed, or compound.

SEC. 3. The regulations hereinafter described apply to those persons whose places of business are located within 5 miles of the cantonment site or the training camp area in Pulaski County known as the Twelfth Division Army Camp: *Provided*, That nothing in these regulations shall be construed to apply to the cities of Little Rock and Argenta.

SEC. 4. No person shall engage in the business of restaurant, hotel, lunch counter, grocery, delicatessen, fruit store, ice cream parlor, refreshment stand, push cart, wagon, or any place where food or food products, within the meaning of the word as herein described, are stored, prepared, handled, sold, exchanged, offered for sale, given away, or intended for human consumption, without first obtaining permit for the conduct of said place of business as above enumerated, from the health officer of the State of Arkansas: *Provided*, That any person engaged in the above business at the time of the promulgation of these regulations within the territory described in section 3 of these regulations shall procure permit for the continuation of said business from the health officer of the State of Arkansas within 10 days of the date of the promulgation of these regulations.

SEC. 5. No person shall hereafter engage in the business, as herein described, nor in the business of any hotel, lodging house, rooming house, or public inn, in any manner or in any capacity and no person shall engage for employment in any of the above enumerated businesses, any person not in possession of a certificate from a regular licensed and practicing physician, who is approved by the State health officer, certifying that the person so employed in the business has been examined by him within the last 30 days and at that time was free from any contagious, infectious, or communicable disease of any nature. No person shall engage in the business as herein described, in any capacity, who is exposed to or has come in contact with any communicable disease. Each person engaged in any capacity in the business herein described shall be vaccinated against typhoid fever and smallpox in a manner approved by the State health officer.

SEC. 6. No person shall engage in the business herein described or shall maintain on the premises, cart, wagon, stand, or shall prepare, store, handle, sell, offer for sale, or give away, barter, or exchange any food within the meaning of the word as herein described which is not clean, pure and wholesome, and suitable for human consumption within the broadest meaning of these terms.

SEC. 7. Each person engaged in the business as herein described shall at all times maintain the premises of the place of business in a clean and sanitary condition. The place shall be well illuminated and ventilated, free from vermin, foul odors, dust, dirt, accumulations of wastes and refuse of all character.

SEC. 8. All food within the meaning of the word as herein described, maintained, or offered for sale or exchange, within the meaning of the words as herein described, shall be covered by some permanent means such as glass, wood, metal, or pasteboard, or paper or other suitable material in such manner or means as to adequately protect it from flies, dirt, dust, or contamination. No covering other than that of fixed and permanent character will be recognized as conforming to the requirements of these regulations.

SEC. 9. All utensils used in the preparation, service, and sale of any food or drink within the meaning of these words as herein described, shall be properly and adequately cleansed after being used and no such utensil shall under any circumstances be used a second time unless it shall have been, after such use thereof, so cleansed. In such cleansing the use of water which has become insanitary from previous use or water which has not been certified as safe and suitable for human consumption by the State health officer is prohibited.

SEC. 10. *Water-closets and privies.*—All persons engaged in the business shall provide a privy which is amply illuminated, ventilated, properly and adequately screened and otherwise made fly-proof, and the receptacle be constructed and maintained water-tight. The disposal of excreta shall conform to existing State laws regulating same. All privies shall be located at a proper distance from the place of business.

SEC. 11. *Washing facilities.*—All such persons engaged in the business shall provide washing facilities, ample for the use of the employees, and these facilities shall at all times be maintained in a clean and sanitary condition. Running water from an elevated container, soap, and individual clean towels shall be furnished those employed therein.

SEC. 12. Persons engaged in the business as herein described shall provide suitable receptacles for all garbage, refuse, and waste. Such receptacles shall be ample in size and sufficient in quantity to meet the needs of the business; constructed with a tight-fitting cover of metal. They shall be placed at least 9 inches from the ground, and be amply removed from the place of business, and emptied at least once every 24 hours. All garbage, waste, refuse, or other matter within the meaning of these terms shall be removed, burned, buried, or otherwise destroyed in a manner conforming to the requirements of existing State laws.

SEC. 13. *Water supply.*—The water supply for all places of business, as above described, shall be ample in quantity and obtained from a source which has been certified by the hygienic laboratory of the State of Arkansas as safe and suitable for human consumption. The water supply, if drawn from the distributing system of the community or other source and stored in such places of business, shall be drawn, stored, and maintained in such a manner as to preclude all possibility of pollution or contamination by any matter or by any means which will render the water uncleanly in its broadest meaning, or unsuitable for human consumption.

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## PUBLIC HEALTH ADMINISTRATION IN SPRINGFIELD, OHIO.

By CARROLL FOX, Surgeon, United States Public Health Service.

The following report gives the results of a study of health organization and administration in the city of Springfield, Ohio. The study was carried on throughout a period of approximately two months, from February 19 to April 14, 1917, and included investigations in both the office and the field.

Springfield is a prosperous city, situated in the southwestern section of the State of Ohio, 80 miles north of Cincinnati, 25 miles northeast of Dayton, and 45 miles west of Columbus. It is the county seat of Clark County. A small stream, known as Buck Creek, passes through the city. This creek empties into the Mad River just without the city limits.

Springfield is a manufacturing community, surrounded by agricultural country. Among the industries of magnitude may be mentioned the manufacture of road rollers, agricultural implements, gas and gasoline engines, steam radiators, windmills and pumps, automobile trucks and pleasure cars, emery wheels, chemicals, flour mills, steel structural work, house furnaces, electric fans and motors, coffins and caskets, productive machinery, piano plates, and motor washers. Springfield is also noted for its horticultural industries.

The city is served by four railroads (the Big Four, the Pennsylvania, the Erie, and the Detroit, Toledo & Ironton), in addition to five traction lines.

The population figures used in this report were obtained from the United States Census Bureau, which estimates the population as of July 1, 1916, at 51,550. The colored population of the city is 5,350.

For assistance and information received during the course of this study acknowledgment is made to the officials of the health and other city departments and to other citizens connected with various charitable organizations or otherwise interested in public health.

#### ORGANIZATION AND ADMINISTRATION.

The city of Springfield is under the commission-manager form of government. The commission is composed of five members, elected from a nonpartisan ticket. This commission appoints the city manager as the administrative head of the municipal government. He in turn is authorized to appoint certain of the city officials as deputies in departments over which he has immediate control. Among these deputies is the health officer, who is officially known as the director of public health.

The activities engaged in by the health department are the registration of births, deaths, and diseases; the control of diseases, including the operation of an antituberculosis dispensary and field work in connection therewith; the maintenance of a diagnostic laboratory; the inspection of milk and other foods; the abatement of nuisances; plumbing inspection; and the treatment of the indigent sick.

*Personnel.*—The personnel of the health department, together with their respective salaries, is at present as follows:

1 director of health (full time)-----	\$2, 500
1 assistant director and city physician (full time)-----	1, 500
1 public-health nurse-----	<sup>1</sup> 1, 080
1 public-health nurse-----	960
1 dairy and food inspector and city veterinarian-----	1, 400
1 sanitary inspector-----	900
1 plumbing inspector-----	1, 400
1 clerk-----	840
1 poundmaster (six months)-----	480
1 laboratory attendant, paid at the rate of 15 cents per hour for not more than 100 hours per month.	

*The director of health.*—The director of health is a physician, experienced in public-health work. The city manager makes the appointment and it is to him that the director is responsible for the work of the health department.

The powers and duties of the health officer are defined by State laws. In addition he is required to enforce the city ordinances pertaining to health and sanitation and to perform such other duties as the city manager may direct.

The duties of the director may be defined as administrative, epidemiological, bacteriological, and professional, the latter furnished at the dispensary for the treatment of the tuberculous and the indigent sick.

*The assistant director of health.*—The assistant director is in reality the city physician. His duties are mainly concerned with the treatment of the city's poor, and professional services furnished to the city jail. He is required to respond to night calls. He is employed on full time and, therefore, is in a position to assist the director in work of a strictly public health nature as well as to perform the duties of a city physician.

During the year 1916 the work performed by the health department on account of diseases other than those affecting the public health included 792 visits made to homes of sick persons, 335 treatments given at the dispensary, and in addition there were 37 physical examinations made for the police and fire departments.

*The clerk.*—The clerk of the department has numerous duties to perform. He is telephone clerk, vital statistics clerk, complaint clerk, order clerk, license clerk, record clerk, bureau of information, and stenographer and typewriter.

*The sanitary inspector.*—The sanitary inspector is engaged in the customary duties of that office, including the posting of placards and fumigations.

*Office hours.*—The office, dispensary, and laboratory are located in the city hall. The official hours are from 8 a. m. to 5 p. m., with one

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<sup>1</sup> The salary of this nurse is paid by the Federated Clubs.

hour for lunch every day except Saturday, Sunday, and holidays. On Saturday the office closes at noon. On Sundays and holidays it is closed, but burial permits may be secured from the residence of the director or the clerk.

The dispensary is open to the tuberculous from 1 to 3 p. m. on Tuesdays and Fridays, and for the treatment of the indigent suffering from other ailments from 8 to 9 a. m. and 1 to 2 p. m., daily.

Each employee may be granted two weeks' vacation a year with full pay.

*Transportation.*—The director, the assistant director, and the dairy inspector are each furnished with inexpensive automobiles. This form of transportation enables these officials to perform a large amount of work efficiently and expeditiously at a reasonable figure. During the year 1916 the cost of operating the three machines was \$630.90, or \$210.30 for each machine, including gas, oil, tires, and repairs. This amounts to but 67 cents per machine per working day.

The plumbing inspector is furnished with street-car tickets. The sanitary inspector and nurses ride free on the street cars.

*Dissemination of information.*—Except for the annual report, there is no bulletin published by the health department. On a few occasions public health exhibits, including the State board of health exhibit, have been shown, and talks on public health subjects are occasionally given. Articles of a public health nature are published in the newspapers from time to time.

In order that better cooperation may be obtained between the various local health officers throughout the county and that uniform procedures may be established, the director of health has been instrumental in organizing the Clark County Health Officials' Association, which meets once a month at the health department in Springfield. Here talks are given and there is an interchange of ideas. It is an educational feature that should be productive of great good. Very frequently a representative of the State board of health is in attendance at these meetings.

*Discussion.*—The system of government in the city of Springfield, when considered with the efficiency of the officials in charge, may be said to be one approaching the ideal. Under this form of government there has been developed the nucleus of a health department which requires only a little financial assistance and the cooperation of the people to expand into a highly efficient organization.

The cooperation of the people can be obtained only after a campaign of education, which has not in the past been carried on to any great extent. It is thought that the scheme of education which will produce the best results is that which will instruct the school children on the subject of disease prevention. To accomplish this it would

be advisable for the board of education to place the health officer on its staff, he to give lectures on public health once a week in the high school, and if time will permit, in the grade schools as well. The health department should then publish a small weekly bulletin to be distributed to the children at the close of the lecture and to contain briefly the subjects which have been lectured upon.

This course in public health should be made a part of the regular curriculum and the pupils should be made to pass an examination upon it, as in the case of other subjects taught.

The health department has been making very commendable efforts to keep accurate statistics on births, deaths, diseases, etc. Such statistics, together with the record of expenditures, are the bookkeeping of the public health, and it is only by comparison of these various records that the health department can determine its profits and losses. It is a difficult matter to keep accurate figures with continual interruptions, and it is thought advisable to employ an additional clerk, who could act as telephone clerk and bureau of information and thus permit the clerk already employed to devote his time purely to clerical matters.

As is usual in most health departments, the sanitary inspector is engaged to a large extent in the abatement of nuisances which have little or no bearing upon the public health. He should be in a position to devote his entire time to the elimination of those nuisances which are really important from a public health standpoint, such as surface privies and surface wells, accumulations of manure, and mosquito breeding centers, and to the enforcement of the requirement that householders provide themselves with garbage cans.

The abatement of such nuisances as bad odors, ash heaps, dead dogs, chickens, slop water, etc., should be left to the police. The cleaning of alleys is as much a duty of the street department as is the cleaning of streets and should not be made a duty of the health officer. An ordinance requiring the cutting of weeds is needed, but this matter should be placed in the police department for its enforcement.

It is necessary that the work of the employees of the health department be systematized and it would be wise to formulate a book of instructions, so that each employee of the department would know exactly what were his or her duties, authority, and jurisdiction.

#### REGISTRATION OF BIRTHS AND DEATHS.

The registration of births and deaths is carried on under the authority of State law. The health officer of Springfield is the local registrar for the city and the adjoining townships. The registrar's

fees paid by the county to the registrar are transferred to the city treasury and may be made available for carrying on public-health work.

*Registration of deaths.*—During the year 1916 there were reported as occurring in the city of Springfield 849 deaths, exclusive of stillbirths, making a crude death rate of 16.4 per thousand.

Of the above deaths, 417, or 49 per cent, were due to diseases or conditions which might be classed as preventable, according to the information contained on the death certificates.

During the same year there were 95 deaths of infants under 1 year of age. The infant mortality rate was 80.3 per 1,000 births.

The number of stillbirths reported during the year was 59.

Among the colored population there were 98 deaths, exclusive of stillbirths, making a death rate of 18.3 per thousand. Of these deaths, 11 occurred in children under 1 year of age. The infant mortality rate for colored was, therefore, 98.2 per 1,000 births.

*Registration of births.*—During the year 1916 there were reported as occurring in the city of Springfield 1,183 births, exclusive of stillbirths, making a birth rate of 22.9 per thousand.

The number of births among the colored population was 112, making a colored birth rate of 20.9 per thousand.

*Recapitulation.*

	White.	Colored.	Total.
Population.....	46,200	5,350	51,550
Number of deaths.....	751	98	849
Death rate per 1,000.....	16.2	18.3	16.4
Deaths due to preventable causes.....			417
Deaths in infants under 1 year.....	84	11	95
Infant mortality rate per 1,000 births.....	78.4	98.2	80.3
Number of births.....	1,071	112	1,183
Birth rate per 1,000.....	23.1	20.9	22.9
Stillbirths.....	48	11	59

The following table gives certain statistics relative to morbidity and mortality compiled from death certificates filed in the health department during the year 1916:

Diseases.	Total deaths, all ages.	Death rate per 100,000.	Number of cases reported.	Case fatality per 100.	Deaths under 1 year of age.
Tuberculosis, pulmonary.....	61	118.3	105		
Tuberculosis, other forms.....	11	21.3			1
Pneumonia.....	74	143.5	12		14
Typhoid fever.....	17	32.9	80	21.2	
Influenza.....	25	48.4			
Measles.....	7	13.5	919	.76	2
Diphtheria.....	4	7.7	51	7.8	
Scarlet fever.....	3	5.8	105	2.8	
Whooping cough.....	10	19.3	246	4.0	3
Meningitis.....	7				2
Septicemia.....	11				
Erysipelas.....	1				
Syphilis.....	4		8		2
Tetanus.....	1		1		
Chicken pox.....			302		
Gonorrhea.....			9		
Mumps.....			5		
Ophthalmia neonatorum.....			7		
Smallpox.....			4		
Trachoma.....			4		
Diarrhea and enteritis.....	29				17
Other infections.....	7				
Malignant growths.....	38	73.7	1		
Occupation accidents.....	6				
Other accidents.....	47				
Premature.....	18				18
Convulsions, malnutrition, etc.....	13				13
Other causes peculiar to early infancy.....	23				23
Total.....	417				95

## EPIDEMIOLOGICAL ACTIVITIES.

### Report of Diseases.

The notification of diseases is required by law and by the regulations of the State board of health. These regulations are based on the model law for morbidity reports.

*Methods of procedure.*—In reporting diseases physicians usually make use of the telephone. The information reported is noted temporarily on a blank form, which is referred for necessary action to the official responsible for the enforcement of the regulations to prevent the spread of the disease. It is likewise entered on a card for the permanent records of the department, as well as on a morbidity report card, which is forwarded weekly to the State board of health.

### Control of Diseases.

*Requirements of laws and ordinances.*—The requirements of State laws have been summarized in a previous report. It is not thought necessary to summarize the local ordinances.

*Methods of procedure.*—The State laws form the basis on which are applied the preventive measures for the control of the communicable diseases.

A record of certain data, as for instance the date of release of quarantine, date of fumigation, number of children in household, etc.,

is made on the morbidity report card filed as a permanent record of the department.

An epidemiological history is obtained of each case of smallpox and typhoid fever, the former by the health officer or his assistant, the latter by these officials or by one of the nurses.

At least one follow-up visit is made by a nurse to each case of typhoid fever and diphtheria, and some supervision is maintained over tuberculosis.

In the case of scarlet fever and diphtheria houses are placarded by the health officer or his assistant, who at the same time gives the necessary instructions relative to isolation of the patient, quarantine of contacts, etc. In the case of other disease, placards are posted by the sanitary inspector, who also performs the fumigations required by law.

After recovery from a communicable disease a certificate is furnished to the patient, stating that he has had such a disease. This is not only of value for future use in determining immunes but also serves as authority to return to school.

A monthly record sheet, to serve as a "daily reminder," is kept, showing the name and address of patient and the diagnosis for each disease requiring quarantine, together with the date on which quarantine is due to be raised.

The school is notified whenever a pupil has, or is exposed to, a quarantinable disease.

The following table shows the amount of work engaged in by the health department during 1916 in matters relating to quarantine and kindred subjects:

Total number of houses quarantined.....	1, 150
Total number of throat cultures taken.....	400
Total number of persons given antitoxin.....	22
Total number of vaccinations made.....	108
Total number of certificates of immunity issued.....	930
Total number of medical examinations made for differential diagnosis...	306
Total number of houses fumigated.....	196
Total number of rooms fumigated.....	563

*Typhoid fever.*—Typhoid fever is endemic in the city of Springfield. During the year 1916 there were 80 cases notified, with 17 deaths, making an indicated death rate of 32.9 per 100,000, and a case fatality rate of 21.2 per cent. The number of cases of typhoid fever reported during the years 1914, 1915, and 1916, as well as for the combined periods, is shown in charts 1 and 2. The records for the years previous to 1914 are not complete and have, therefore, not been used.

The health department is now making a careful epidemiological study of each case of typhoid fever as it is reported, but as yet there

is not sufficient data on which to base conclusions. Previously the investigations as to the source of the infection were confined almost entirely to the milk and water supply of the household.

Houses are not placarded for typhoid fever.

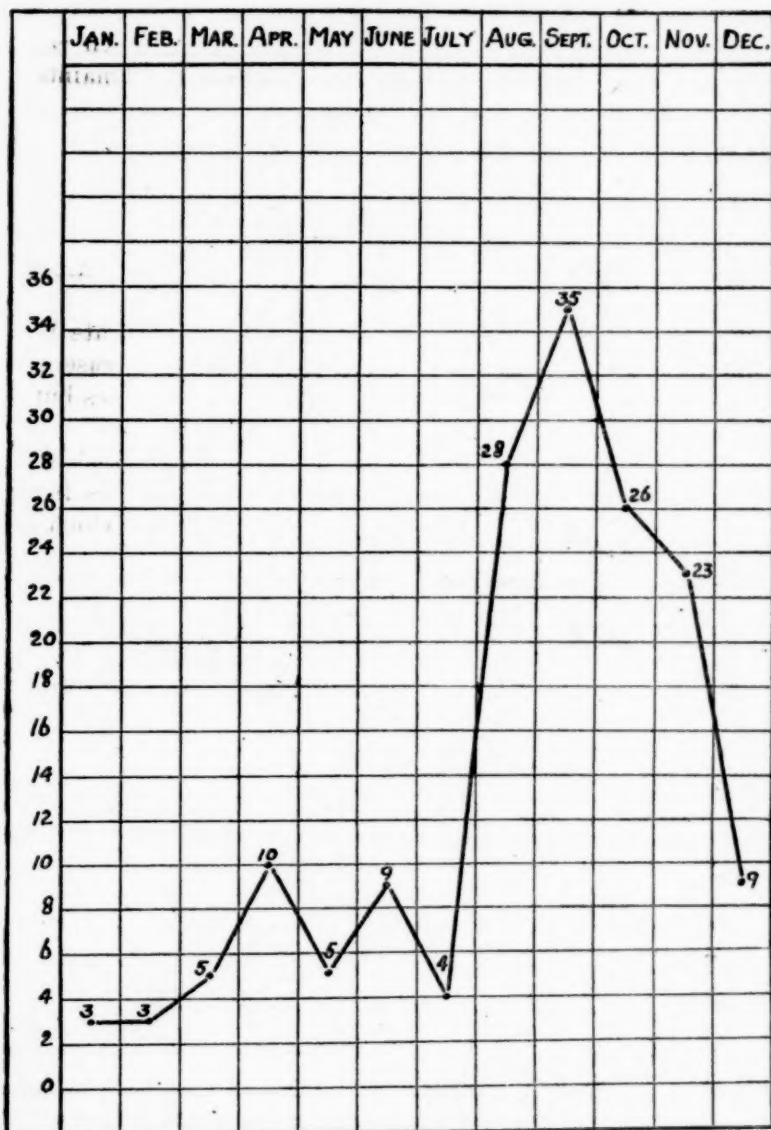


CHART 1.—Cases of typhoid fever reported by months, three-year period, 1914-1916.

*Diphtheria.*—During the year 1916 there were 51 cases of diphtheria notified to the health department, with four deaths. This is an excellent record, meaning an indicated death rate of but 7.7 per 100,000 and case fatality rate of but 7.8 per cent.

When a case of diphtheria is reported the house is placarded and quarantined, a culture from the wage earner is taken, and an immunizing dose of antitoxin given to contacts, either by the attending physician or a physician of the health department. Antitoxin is issued free of charge, both for treatment and prophylaxis. At

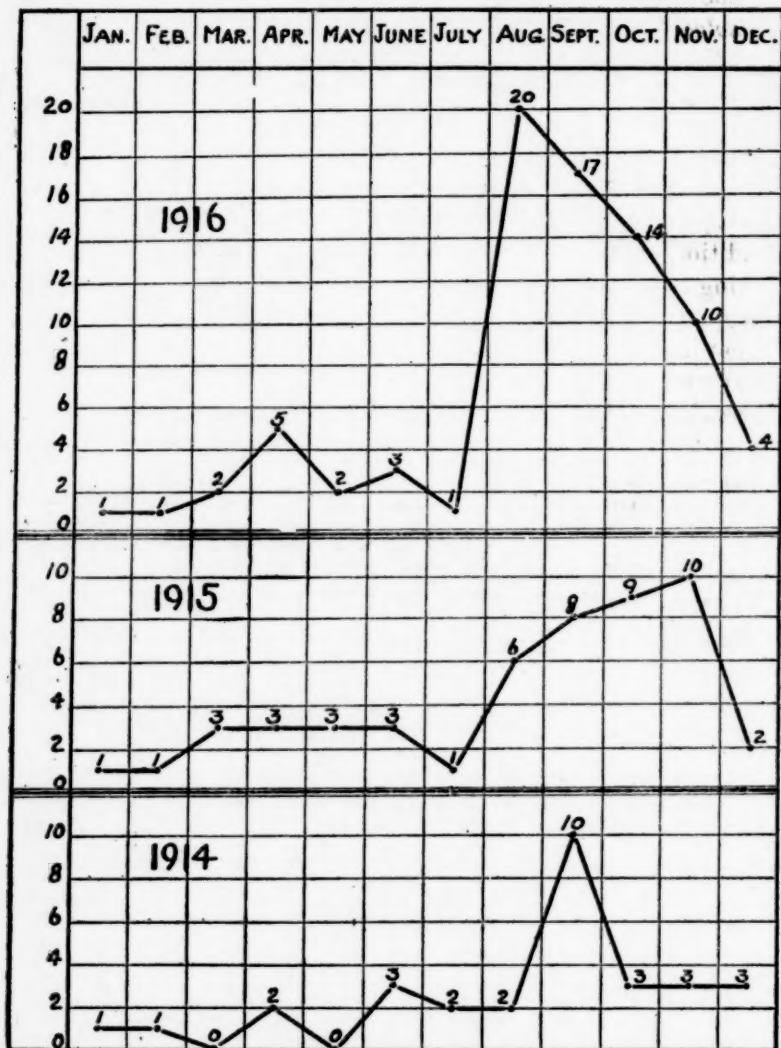


CHART 2.—Cases of typhoid fever reported by months, 1914, 1915, 1916.

the same time cultures are also taken of contacts outside of the household, including pupils of public and parochial schools. The patient is released from quarantine after two successive negative cultures are obtained, taken not less than 48 hours apart. At the time of taking the second culture, swabbings are also made of contacts

in the household. Routine cultures are taken either by one of the physicians of the health department or one of the nurses.

If practicable, cases of diphtheria are isolated in the hospital, when adequate isolation can not be obtained at the home. In this case, all contacts are released without quarantine immediately after finding the nose and throat free from diphtheria bacilli.

*The isolation hospital.*—The isolation hospital is conveniently located on the grounds of the general hospital, operated by the city of Springfield. It is a brick and wooden structure, formerly a residence, and is now out of repair. It contains two bath rooms and eight other rooms, one of which must be used by the nurses in attendance and one for a diet kitchen, which leaves six rooms for ward purposes. Fourteen patients may be isolated without overcrowding. The present condition of the building makes its use as a hospital undesirable, and taking into consideration its age and construction, as to material and design, to remodel would be impracticable. The building at present is not in use. Plans are completed for a new building which will be constructed in the near future.

*Tuberculosis.*—During the year 1916 there were reported to the local registrar 61 deaths from pulmonary tuberculosis. During the same period there were notified 105 cases. The indicated death rate was 118.3 per 100,000. There were also reported 11 deaths from other forms of tuberculosis, making a death rate from tuberculosis, all forms, of 139.6 per 100,000.

*The antituberculosis dispensary.*—The city health department operates an antituberculosis dispensary, which is open twice a week with a doctor and a nurse in attendance.

Patients are referred to the dispensary from various sources, including physicians of the city, the city hospital, and the visiting nurses.

Such information as may be necessary subsequently to identify an applicant for relief is entered in a ledger. The personal and family history and the results of physical and laboratory examination, together with the advice and treatment given are entered on a filing card devised for the purpose. On another card is noted the information relative to temperature, pulse, weight, etc., obtained from time to time at subsequent visits.

Patients are provided with paper napkins and medicines free of charge.

Each case is followed up by a visiting nurse, who gives the necessary advice as to the right way of living to effect a cure and to prevent the spread of the disease to others.

A record of her visits, together with the social history of the patient, is kept by the nurse in a separate file.

During the year 1916 the following work was done in the anti-tuberculosis dispensary:

Number of new cases treated.....	103
Number of old cases treated.....	79
Total visits to dispensary.....	239
Number of patients referred to tuberculosis hospital.....	41

*The tuberculosis sanatorium.*—The tuberculosis sanatorium is a four-county institution, pleasantly located just without the limits of the city of Springfield. It is composed of a community cottage for both male and female patients, 14 small cottages, a nurses' quarters, and an administrative building, originally a private residence, in which are located a dispensary, office, the main kitchen and dining room, quarters for the help, and rooms for the care of advanced cases.

The physician in charge does not reside on the premises.

The normal capacity of the institution is 40 patients. There are at present 41 undergoing treatment, most of them citizens of Springfield.

The water supply is derived from a drilled well and is furnished to the buildings and grounds under pressure from a pressure tank.

Sewage is disposed of by means of a septic tank and filter beds.

The community cottage, administration building, nurses' quarters, and laundry are connected to the sewer.

The sanatorium operates its own dairy and chicken farm, and products are raised from the soil.

*The antituberculosis league.*—This league is a charitable organization which employs one field agent or investigator whose duty it is to investigate the social status of families in which there is a case of tuberculosis and who have applied for material assistance. Supplies, including milk, eggs, coal, etc., are issued free of charge to worthy applicants. The paper napkins used in the dispensary of the health department are furnished by the league. The league will also support patients in sanatoria. While most of the public-health activities concerned with tuberculosis are now carried on by the health department, a certain amount is still performed by the investigator of the league who has not the qualifications of a public-health nurse.

A portion of the income of the antituberculosis league is derived from a percentage of the profits accruing to moving picture houses at Sunday shows.

*The infant welfare society.*—During the period from April to September, inclusive, the infant welfare society, a charitable organization, employs a nurse to do infant welfare work in the field and operates a dispensary located in the courthouse, where children may be taken for advice and treatment. Physicians give their services free of charge. The society also maintains during the hot months of

the year, July and August, an infant welfare camp, at which are employed the necessary attendants and nurses.

Milk is issued free only where the parents can not afford to buy it. Otherwise they are expected to pay if only a small part of the actual price.

*The public-health nurses.*—There are two public-health nurses working under the supervision of the health officer, one of whom is paid from health department funds and one by the federated clubs.

In addition there is one nurse employed by the board of education, one by the Metropolitan Life Insurance Co., and the antituberculosis league employs one investigator, who is not a nurse. These employees are not under the control of the health department.

The health department nurses are engaged in practically all of the activities required of a public-health nurse, including prenatal and infant welfare work, communicable disease nursing, some school nursing in the field and dispensary work in the health department.

At least one visit is made to each case of typhoid fever and diphtheria, and a supervision is maintained over cases of tuberculosis. Infant welfare work is carried on during the winter. During the summer the bulk of this class of work is performed by the infant welfare society.

The city has been divided into two districts, one for each nurse. The nurses are required to keep daily records of visits made, with special record of visits paid to cases of tuberculosis, together with a card giving the social status of the family.

When practicable, pupil nurses are detailed from the city hospital to the health department to receive instruction and practical experience in public-health nursing. This is an excellent idea.

The following table indicates the field work performed by the nursing staff of the health department during the year 1916. One nurse was on duty during the entire year. The second nurse did not enter upon her duties until October, so worked only during the last three months of the year.

Visits made on account of—

Tuberculosis.....	879
Typhoid fever.....	90
Diphtheria.....	183
Exposures to diphtheria.....	97
Scarlet fever.....	159
Exposures to scarlet fever.....	18
Whooping cough.....	69
Measles.....	78
Chicken pox.....	162
Mumps.....	7
Sore throats.....	60
Trachoma.....	25

## Visits made on account of—Continued.

Ophthalmia neonatorum.....	22
Varicous diseases of the eyes.....	119
Prenatal.....	170
The puerperal state.....	91
Infant welfare.....	186
Medical and surgical.....	210
Miscellaneous.....	446
Total.....	3,071
Number of throat cultures taken.....	307

**The Diagnostic Laboratory.**

The city health department maintains a bacteriological laboratory, equipped to perform all necessary examinations of a routine nature. A part-time laboratory assistant is employed, but most of the technical work is done by the health officer, the assistant health officer, and the milk inspector.

In the laboratory are performed examinations for the diagnosis of diphtheria, the release from quarantine, and the detection of carriers; examinations to determine the Widal reaction and the presence of tuberculosis, gonorrhea, and ophthalmia neonatorum. Analyses of urine are rarely made. The milk inspector examines, bacteriologically and chemically, all milk samples collected. Well and city waters are also analyzed bacteriologically, the former when it may bear some relation to a case of typhoid fever, the latter only occasionally.

Three specimen outfits are furnished to the physicians of the city. These may be obtained free of charge from various drug stores designated as distributing stations.

The outfit to be used in suspected typhoid fever contains an aluminum foil and a small wire loop. In the case of suspected tuberculosis a wide-mouth bottle is furnished, while for diphtheria the outfit contains two sterile swabs in a sterile tube.

Each outfit is accompanied by a card on which to note the necessary data, and which contains directions for the collection of the specimen.

A record is kept by the filing-card system of all examinations made.

During the year 1916 there were made in the laboratory 3,791 examinations, as follows:

	Positive.	Negative.	Total.
For tuberculosis.....	75	164	239
For diphtheria:			
Diagnosis.....	29	214	243
Release of quarantine.....	26	119	145
Contacts.....	16	295	311
For typhoid fever (Widal).....	4	19	23
For gonorrhea.....		2	2
For ophthalmia neonatorum.....		2	2
Urine analysis.....			8
Water analysis:			
Well or spring.....			55
City.....			24
River.....			1
Milk analysis:			
Bacteriological.....			872
Chemical.....			928
Visible dirt.....			928
Grand total.....	150	815	3,791

### Discussion.

According to the modern view, a proper supervision over the individual who is sick or who has been in contact with one who is sick is of more importance than a supervision over the environment, for it is the animate and not the inanimate things which are most concerned in the spread of the communicable diseases.

A very important factor in the control of disease is, therefore, the public-health nurse. It is the nurse who reaches the homes of those persons who are most in need of instruction and nursing care and who can ill afford to pay for it. The work of two nurses in a city the size of Springfield must necessarily be superficial, and it is therefore believed advisable for the city to employ two additional nurses, who, with the one already employed and nurse paid for by the federated clubs, would make a staff of four nurses. The city should then be divided into four districts and a nurse placed in each district to carry on within her district all of the duties required of a public-health nurse.

It would be still better if the school board could be induced to employ an additional nurse and then to combine its nursing staff with that of the health department. The antituberculosis league should employ a nurse instead of an investigator and attach her to the health department. This would give the health department seven nurses, and the city could be divided into seven districts, making the work still more effective.

The work performed by the child welfare society is of great importance. It pertains strictly to public health and is therefore a governmental function and should be taken over by the city and made a duty of the health department, which could carry on the work during the entire year. Steps in this direction have already been taken, since for the year 1917 the city has appropriated to the society the sum of \$2,000, which will be spent under the direction of the city manager.

It is planned to add a wing to the present city hospital, and ample provision should be made for an airy ward for the care of children.

To carry on the child-welfare work extensively every birth reported should be followed up by a visit to the home. Upon the first visit the nurse should be provided with a "certificate of registration" to be presented to the parents. Such certificates would have to be provided by the health department.

The typhoid-fever death rate in the city is very high. All of the factors concerned in its spread are present in the city, including the surface privy, the surface well, flies, contacts, a water supply which at times shows evidence of contamination, and a milk supply which, though 95 per cent is pasteurized, is not always of certain purity because the "flash" method is used in some cases, and this method is unreliable. All of these things should be corrected without delay.

Typhoid fever should be made a placardable disease, and disinfectants should be issued free of charge.

All children should be required to be vaccinated against smallpox before they are permitted to attend public or parochial schools.

A bacteriologist should be provided for the laboratory of the health department, and it is suggested that the laboratory might be made available to all of the physicians and health officers of the county, and that financial aid might be received toward its maintenance from the various townships, or the county commissioners.

It is highly satisfactory to know that the city of Springfield has plans completed for the construction of a modern isolation hospital for the isolation of the communicable diseases, including smallpox, to occupy the site of the present hospital. It should contain not less than 30 beds. It should be operated by the city general hospital, but the admission and discharge of patients should be left to the health officer.

#### MUNICIPAL ENGINEERING ACTIVITIES.

*The water supply.*—The municipal water supply is a ground water, obtained from a large dug well located in a valley about 3 miles from Springfield. Through this valley runs a stream, known as Buck Creek. The actual water-bearing stratum consists of a natural gravel bed on each side of the valley from 15 to 20 or more feet in thickness and extending down to clay. That part of the gravel basin from which the water supply of Springfield is obtained has an area of about 35 acres and is limited above by an outcropping of the hardpan, while below a curtain wall of concrete has been constructed extending from the creek to high ground to conserve the ground water, causing it to back up into the well instead of flowing on down the valley.

During warm weather, when the ground water is low and the amount of water pumped is excessive, not enough water filters into

the well to supply the demand, so that it has been necessary to resort to an underdraining system extending up the valley as far as the outcropping of the hardpan and having its outlet into the well. In addition to this it is necessary at times artificially to augment the natural ground-water supply by flooding the surface of the ground with water from the creek by means of a sluice way. The underdrain has the effect of diminishing the amount of filtration and percolation that naturally takes place and forms a more or less direct means of communication between surface water and the well. Flooding the land with a polluted water places an added burden on the natural filter bed between the surface of the ground and the underdrain and is a dangerous procedure.

In order permanently to increase the supply of water for present and future needs, it has been suggested that the system of underdrains be extended above the outcropping of the hardpan, and then on up the valley where water may be obtained in abundance. This extension would include the utilization of water from a number of springs, one of which is said to flow about 7,000,000 gallons per day. The advisability of such a procedure must be left to the sanitary engineers, and it is therefore suggested that before taking any action a comprehensive study be made of the situation with a view to securing a permanent supply that will be satisfactory both as to quantity and quality. Certain it is that the quality of water from surface wells and springs in a limestone country is uncertain.

The Springfield water is always clear, but bacteriological examinations made at infrequent intervals show at times evidence of the presence of colon bacilli. Daily examinations should be made covering a long period through varying conditions. It is also thought that it would be good practice to install a chlorine plant and treat all water before furnishing to the consumers. Such a plant could be installed at little expense and would serve until such time as a more permanent source of supply can be developed, to counteract the ill effects that may occur through occasional pollution.

In addition to the public water supply there are in the city a number of privately owned surface wells of varying depths, many extending down to bedrock (limestone).

During the year 1916, 55 samples of water from as many different wells and a few springs were examined, and 28 showed positive evidence of pollution. There were also made 24 examinations of the city water, with the result that 10, or 41 per cent, of the samples examined showed evidence of the presence of colon bacilli in 10 cubic centimeter amounts. Similar results have been obtained at the laboratory of the State board of health, and in addition the colon bacillus has occasionally been detected in 1 cubic centimeter.

*Disposal of sewage.*—The city is fairly well provided with sewers, both storm water and sanitary, and the system is being extended rapidly. Storm-water sewers empty into Buck Creek and the contents of sanitary sewers pass into the Mad River and into Buck Creek untreated. Plans are already laid for the installation of a modern disposal plant.

There are still a number of insanitary privies in the city but these are being abolished as rapidly as possible. During the year 1916 there were 954 premises connected with the sewer, 254 in new and 700 in old buildings.

*The disposal of garbage and refuse.*—Garbage is collected by contract from residences only, and is fed to hogs. Hotels, restaurants, and commission houses must have their garbage removed by private contract.

The supervision over the system of collection is under the jurisdiction of the city manager's office. The rules adopted to expedite the collection require that all garbage be kept in a metal can with fly-proof cover and that the cover be kept on, that the can be put in a place where it may be easily found by the collector, and that no water, glass, tin cans, grass, etc., be put into the garbage can.

The system of garbage collection used in the city of Springfield is not to be recommended. The city realizes its deficiencies and has plans under way eventually to take over the collection and to erect an incinerator. At the same time a collection of rubbish will be instituted. At present rubbish is collected annually instead of weekly.

#### FOOD INSPECTION.

The inspection of foods, including milk, and the inspection of places handling foods are carried on by the dairy and food inspector, who is a doctor of veterinary medicine. He also performs the laboratory examinations of samples collected. Samples of milk are collected and examined once a week. With but one inspector for food inspection it is not practicable to exercise a thorough supervision over the sale of foods from all of its various angles. The ante and post mortem inspection of animals killed in the local slaughterhouses is not attempted. Of all foods, milk is by far the most important from the standpoint of the public health, and the inspector has therefore very properly devoted much of his time to the control of the milk supply.

The farms supplying milk to Springfield vary from those with no equipment, primitive methods, and poor stock, farms that score 0 to those modern in equipment and methods with tuberculin-tested, registered stock, and which would score 90 or above. There are, in all, about 350 farms producing milk for sale in Springfield, most

of them operated by farmers who carry on the dairy business merely as a side issue.

Milk is brought to the city in unsealed cans, much of it by wagons or autotrucks. Some is shipped by interurban electric and a small part by railroad. The longest haul is about 12 miles.

It is estimated that about 95 per cent of the raw milk is pasteurized before reaching the consumer. There are four pasteurizing plants, two using the holding and two the flash method. The latter is unreliable and should be supplanted by the holding method, meaning briefly that the milk should be heated rapidly to a temperature of 145° F. and held at that temperature for 30 minutes. To secure accuracy each plant should be equipped with a temperature recorder and a thermoregulator and the technique should be checked frequently by the milk inspector by bacterial counts made during the different stages of pasteurization. After pasteurization the milk should be immediately cooled and bottled. All milk should be delivered to the consumer in machine-capped bottles. At present there is no law prohibiting the sale of dipped milk.

All milk sold in the city should be pasteurized as above and a bacterial standard should be set for pasteurized milk, which should contain not more than 50,000 bacteria per cubic centimeter when delivered to the consumer.

There are 7 slaughterhouses located in and around the city of Springfield. In none is there any inspection of animals slaughtered. One has permission from the Federal authorities to carry on an interstate business. An additional inspector in the city health department could devote some time to meat inspection under the veterinarian of the department, and it would be wise for the city to establish a municipal slaughterhouse, so that slaughtering could be carried on in one place and a better supervision maintained.

The following is a summary of the inspection work carried on by the dairy and food inspector during the year 1916, together with the results of the examinations of milk samples.

Number of samples of milk having 100,000 bacteria or less:

Raw .....	421
Pasteurized .....	34

Number of samples of milk having over 100,000 bacteria:

Raw .....	397
Pasteurized .....	20

Number of inspections made:

Dairies .....	437
Cows .....	4,480
Milk plants .....	53
Groceries, meat stores, restaurants, abattoirs, etc. ....	1,693

### THE HEALTH SUPERVISION OF SCHOOLS.

The health supervision of schools is paid for and is under the jurisdiction of the board of education, which employs one nurse for field and dispensary work. There are no medical inspectors employed. A dispensary is maintained in one of the schools, well equipped for medical and dental work. The medical work consists chiefly of the diagnosis and treatment of diseases of the eye, ear, nose, and throat. A specialist gives his services free of charge. The dental work is performed alternately by different members of the dental society, whose services are furnished without cost.

It has already been suggested that the board of education add to its nursing staff and then attach its nurses to the health department. This would be in line with modern views and should result in great benefit to all concerned.

### EXPENDITURES AND APPROPRIATIONS.

There was allotted to the health department for use during the year 1916 the sum of \$12,450. This allowance is elastic and may be increased or decreased from time to time by the city commission. During the same period there was expended for operation and maintenance the sum of \$10,785.95, as determined from the records on file in the health department. The cost of operation is shown in more or less detail in the accompanying table.

In addition to the above, the auditor's statement shows that there were certain sums paid out during the year as reimbursements for the payment of bills contracted during the previous year. These expenses have not been included in the itemized statement as not being connected with the actual cost of the department during the year 1916.

During the year there were collected in fees \$2,552.35.

That part of the income of the city for the year 1916 which could be used for expenses incurred in ordinary operation and maintenance of city government was \$409,045. From this amount there was expended for the protection of the public health but 2.6 per cent as against 12.9 per cent for fire, and 10.2 per cent for police protection.

The amount allowed for the protection of the public health during 1917 is even less than that allowed for 1916, although the presence of smallpox has made it necessary to appropriate an additional sum for emergency purposes.

The city of Springfield may take just pride in the fact that it has the foundation of an excellent health department which, by a little rearrangement and some additions, could be made a highly efficient organization. As it is, it is only possible to take up the various problems in a more or less superficial manner.

To carry on the work, as outlined in the foregoing report, would require a minimum expenditure of \$17,000 a year, which figure represents about 4.1 per cent of the available revenues of the city, and which is little enough to spend in the prevention of disease.

The sum might be expended as follows:

1 health officer.....	\$2,500
1 assistant health officer and city physician.....	1,500
1 bacteriologist.....	1,000
1 dairy and milk inspector.....	1,400
1 food inspector.....	900
1 public-health nurse.....	960
2 public-health nurses, at \$900.....	1,800
1 sanitary inspector.....	900
1 vital statistic clerk.....	840
1 telephone clerk.....	480
1 laboratory attendant (part time).....	180
<b>Total.....</b>	<b>12,460</b>
Transportation, office, and dispensary supplies, etc.....	4,540
	<b>17,000</b>

It will be noticed that the above scheme contemplates the employment of 5 additional employees, namely a bacteriologist, 2 public-health nurses, a food inspector, and a telephone clerk and stenographer; the transfer of the plumbing inspector to a building division of the engineering department; the continuance of the work of treating the indigent sick, which the health department is now required to do; and the transfer of the poundmaster.

	General admin- istration.	Epidemiology.	Laboratory.	Visiting nurse.	Milk inspec- tion.	Vital statistics.	Sanitation.	Plumbing inspection.	Education.	Dispensary and treatment of the indigent sick.	Total.
Badges.....				\$5.50			\$2.75				\$8.25
Binding.....						\$6.00					6.00
Books.....	\$5.00										5.00
Drugs, chemicals, and disinfectants.....		\$257.40	\$17.14							\$128.12	402.66
Electrical supplies.....	3.00							\$3.73			6.73
Emergency services.....		3.00									3.00
Exhibit.....									\$11.50		11.50
Ice.....			21.00								21.00
Laboratory supplies.....			100.02								100.02
Maintenance of people in quarantine.....		57.03									57.03
Medical supplies.....										45.10	45.10
Miscellaneous.....		9.33									9.33
Nursing supplies.....			10.00								10.00
Office supplies.....	4.90	1.20	4.50			1.50				.60	12.70
Postage.....	35.00							10.00			45.00
Printing.....		33.90	10.75		\$21.25		11.75	101.50			179.15
Salary.....	2,143.37	<sup>1</sup> 621.22	153.60	894.61	1,200.00	\$31.59	793.12	1,400.00		<sup>1</sup> 621.23	8,658.74
Scientific apparatus.....			14.00								14.00
Specimen outfits.....			9.80								9.80
Stationery.....	45.45	15.00				1.25				2.75	64.45
Transportation.....	210.30	<sup>1</sup> 105.15			<sup>2</sup> 617.97			60.00		<sup>1</sup> 105.15	1,098.57
Typewriters and re- pairs.....	7.70										7.70
Vaccine.....		10.20									10.20
<b>Total.....</b>	<b>2,454.72</b>	<b>1,113.43</b>	<b>326.31</b>	<b>914.61</b>	<b>1,839.22</b>	<b>840.34</b>	<b>807.62</b>	<b>1,575.23</b>	<b>11.50</b>	<b>902.95</b>	<b>10,755.93</b>

<sup>1</sup> One-half of salary and transportation charged against epidemiology and one-half against treatment of the indigent sick.

<sup>2</sup> Includes the cost of one new machine.

## RECOMMENDATIONS.

As a result of the foregoing study and after careful consideration of conditions, certain conclusions have been reached which have been made the basis of the following recommendations:

1. That a full-time bacteriologist be employed at not less than \$1,000 a year.
2. That the nursing staff be increased by the addition of two public-health nurses, each to receive a salary of not less than \$900 a year.
3. That a telephone clerk be added to the staff of the health department.
4. That a food inspector be employed at not less than \$900 a year to work under the supervision of the milk and dairy inspector.
5. That the board of education employ one more nurse and attach its staff of nurses to the health department.
6. That the antituberculosis league employ a nurse instead of an investigator and attach her to the health department.
7. That the city be divided into seven districts and a nurse placed in each district to perform within that district all of the duties required of a public-health nurse, including post and prenatal work, infant welfare work, school nursing, and services required in the control of the communicable diseases.
8. That the work of the infant welfare society be taken over by the health department.
9. That a nurse follow up every birth reported to the health department, and that she be provided with a "certificate of registration" to present to the parents, this certificate to be furnished by the health department; and that activities concerned in the conservation of child life be carried on during the entire year.
10. That provision be made in the new wing of the city hospital for the care of infants.
11. That an isolation hospital of not less than 30 beds be constructed on the site of the old hospital; that it be used for the isolation of all communicable diseases (including smallpox) except tuberculosis.
12. That the isolation hospital be under the supervision of the city hospital, but that the admission and discharge of patients be placed under the control of the health officer.
13. That typhoid fever be made a placardable disease, and that disinfectants be issued free of charge to families in which there is a case of that disease.
14. That all children be required to be vaccinated against smallpox before entering the public or parochial schools.
15. That all surface wells and privies be abolished within the city limits.

16. That the city water supply be treated by chlorination before it is delivered to the consumer.

17. That daily bacteriological examinations be made in the laboratory of the health department of the city water supply.

18. That all of the milk of the city of Springfield be pasteurized before delivery to the consumer.

19. That the standard for pasteurized milk shall be as follows: That it be heated rapidly to a temperature of 145° F. and held at that temperature for 30 minutes; that it be cooled immediately to a temperature of 50° F. or lower and promptly bottled; and that it contain not more than 50,000 bacteria per cubic centimeter when delivered to the consumer.

20. That milk from dairies which do not score 60 or above be excluded.

21. That milk be transported from producer to distributor in sealed cans, and that only bottled milk be sold to consumers.

22. That the board of education appoint the health officer as a member of its teaching staff to lecture to the pupils of the high and grammar schools on the subject of public health, and that the pupils be required to pass an examination on that subject upon the completion of the course.

23. That the health department issue a weekly bulletin on the subject of the lecture, a copy to be given to each pupil.

24. That the city install as soon as practicable a modern disposal plant for the treatment of sewage, a chlorine plant for the treatment of the water supply, a municipal abattoir and an incinerator for the disposal of garbage.

25. That thorough and comprehensive study be made looking toward the development of a satisfactory water supply for the city.

26. That ordinances be passed requiring the proper disposal of manure and stable refuse and the cutting of weeds.

27. That the sanitary inspector be authorized to devote his entire time to those matters which have a direct bearing on the spread of communicable disease, including the abolition of surface wells and surface privies, the proper disposal of manure, and the requirement that all householders provide themselves with a garbage can.

28. That the police department lend its cooperation by making it a duty of the patrolmen to abate those nuisances which have no direct bearing on the spread of communicable disease, such as ash piles or other accumulations of rubbish, unsightly matters in general, weeds, chicken yards, slop water, bad odors, etc.

29. That the plumbing inspector be transferred to a building division or the engineering department.

30. That the poundmaster be transferred to the service department.

31. That as soon as practicable the city inaugurate a system of garbage and refuse collection, including manure.

32. That not less than \$17,000 be appropriated to the health department to be spent as outlined in the body of the report.

33. That in the building code, now being written, ample provision be incorporated to prevent block congestion and overcrowding of houses; to regulate the construction and use of tenement and lodging houses, etc.; to require ample toilet and bathing facilities and sewer connections, etc.

34. That certain changes be made in the system of filing records in the department and that there be added to this file a record of expenses.

35. That the work of the department be systematized and that rules be published showing the exact duties, authority, and jurisdiction of the various employees.

# PREVALENCE OF DISEASE.

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.*

## UNITED STATES.

### CURRENT STATE SUMMARIES.

#### California Report for the Week Ended August 4, 1917.

The California State Board of Health reported concerning the status of preventable diseases in California for the week ended August 4, 1917, as follows: Two cases of anthrax in man were notified at Dos Palos, Merced County, contracted in skinning a cow. Fifteen cases of anthrax in animals were notified on 7 ranches in the central part of Yolo County. Preventive measures, including vaccination, were employed to control the spread of the disease. One case of poliomyelitis occurred at San Francisco. Of cerebrospinal meningitis, two cases were notified, one at Oakland and one at San Francisco. Thirty-three cases of typhoid fever were reported, scattered over the State, four cases having occurred in a mining camp in Nevada County. Four cases of smallpox were notified near Selma, Fresno County.

The details of notifiable disease cases reported during the week ended July 28, are as follows:

	Cases.		Cases.
Cerebrospinal meningitis.....	2	Pellagra.....	1
Chicken pox.....	29	Pneumonia.....	10
Diphtheria.....	18	Poliomyelitis.....	2
Dysentery.....	1	Scarlet fever.....	41
Erysipelas.....	5	Smallpox.....	9
German measles.....	4	Syphilis.....	18
Gonococcus infection.....	41	Tetanus.....	1
Malaria.....	24	Tuberculosis.....	116
Measles.....	68	Typhoid fever.....	28
Mumps.....	43	Whooping cough.....	22

### CEREBROSPINAL MENINGITIS.

#### Massachusetts.

During the week ended August 4, 1917, new cases of cerebrospinal meningitis were notified in Massachusetts as follows: Boston, 2; Gloucester (Town), 2; Springfield, 1; New Bedford, 1.

## CEREBROSPINAL MENINGITIS—Continued.

## Minnesota.

The outbreak of epidemic cerebrospinal meningitis in Minnesota seems to have subsided, if we may judge from the reported cases, which are shown in the accompanying table. The crest of the outbreak seems to have appeared in April.

	Cases.		Cases.
January, 1917.....	5	May, 1917.....	68
February, 1917.....	31	June, 1917.....	37
March, 1917.....	75	July, 1917.....	13
April, 1917.....	103	August 1 to 6, 1917.....	1

## State Reports for June, 1917.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		New York—Continued.	
Houston County.....	1	Erie County.....	10
Jackson County.....	1	Essex County.....	1
Limestone County.....	1	Greene County.....	1
Total.....	3	Monroe County.....	1
New York:		Nassau County.....	1
Albany County.....	2	Niagara County.....	1
Broome County.....	1	Onondaga County.....	1
Delaware County.....	1	New York City.....	37
		Total.....	57

## City Reports for Week Ended July 21, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	3		Los Angeles, Cal.....	1	1
Baltimore, Md.....	2	1	Milwaukee, Wis.....	1	1
Boston, Mass.....	2	1	Minneapolis, Minn.....	1	
Brockton, Mass.....	1		New Bedford, Mass.....		1
Chicago, Ill.....	10	5	New Britain, Conn.....		1
Cleveland, Ohio.....	2	3	New Haven, Conn.....	1	1
Columbus, Ohio.....	1	1	New York, N. Y.....	6	4
Dayton, Ohio.....		2	Niagara Falls, N. Y.....	1	1
Detroit, Mich.....	1		Passaic, N. J.....	1	
Duluth, Minn.....		1	Philadelphia, Pa.....	2	5
Elizabeth, N. J.....	1		Pittsfield, Mass.....	1	
El Paso, Tex.....		1	Providence, R. I.....	3	
Evansville, Ind.....	1	1	Racine, Wis.....		1
Galveston, Tex.....	1		St. Louis, Mo.....	4	1
Grand Rapids, Mich.....	1	1	San Diego, Cal.....	10	
Hartford, Conn.....	2	3	San Francisco, Cal.....	1	
Haverhill, Mass.....	1		Steubenville, Ohio.....	1	
Jersey City, N. J.....	1		Washington, D. C.....	1	1
Lexington, Ky.....		1	Wheeling, W. Va.....		1

## DIPHTHERIA.

## Rhode Island—Newport.

The Secretary of the State Board of Health of Rhode Island reported August 6, 1917, that there was an outbreak of diphtheria in Newport and vicinity.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1288.

## ERYSIPELAS.

## City Reports for Week Ended July 21, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Allentown, Pa.....	1	.....	Lancaster, Pa.....	1	.....
Baltimore, Md.....	1	.....	Long Beach, Cal.....	1	.....
Buffalo, N. Y.....	5	.....	McKeesport, Pa.....	1	.....
Canton, Ohio.....	.....	1	Milwaukee, Wis.....	.....	1
Chicago, Ill.....	13	3	Newark, N. J.....	8	1
Cleveland, Ohio.....	8	.....	Philadelphia, Pa.....	3	.....
Denver, Colo.....	3	1	Pittsburgh, Pa.....	.....	3
Detroit, Mich.....	.....	1	Rochester, N. Y.....	3	.....
Flint, Mich.....	1	.....	St. Joseph, Mo.....	1	.....
Johnstown, Pa.....	1	.....	St. Louis, Mo.....	4	.....
Kalamazoo, Mich.....	2	.....	San Francisco, Cal.....	5	.....

## LEPROSY.

## City Report for Week Ended July 21, 1917.

During the week ended July 21, 1917, 1 case of leprosy was reported at Los Angeles, Cal.

## MALARIA.

## Alabama Report for June, 1917.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		Alabama—Continued:	
Blount County.....	3	Lauderdale County.....	1
Bullock County.....	2	Madison County.....	1
Cherokee County.....	1	Marion County.....	1
Choctaw County.....	2	Mobile County.....	2
Clarke County.....	2	Monroe County.....	2
Coffee County.....	4	Montgomery County.....	1
Colbert County.....	1	Morgan County.....	2
Conecuh County.....	1	Perry County.....	4
Dallas County.....	3	Pickens County.....	1
Etowah County.....	1	Russell County.....	2
Fayette County.....	1	Shelby County.....	1
Franklin County.....	1	Sumter County.....	2
Geneva County.....	1	Talladega County.....	3
Greene County.....	7	Tuscaloosa County.....	17
Hale County.....	3	Walker County.....	2
Houston County.....	25	Washington County.....	1
Jackson County.....	2	Total.....	133
Jefferson County.....	30		

## City Reports for Week Ended July 21, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala.....	16	.....	New Orleans, La.....	2	.....
Columbia, S. C.....	4	.....	San Francisco, Cal.....	1	.....
Little Rock, Ark.....	1	.....	Savannah, Ga.....	5	.....
Memphis, Tenn.....	.....	3	Schenectady, N. Y.....	1	.....
Newark, N. J.....	1	.....			

<sup>1</sup> The reason that Birmingham had so many more cases of malaria reported than any other city is not that the disease is more prevalent in Birmingham than in other cities of Alabama and neighboring States, but undoubtedly because of the successful efforts the health department has made in securing the cooperation of the practicing physicians in reporting cases.

## MEASLES.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1288.

## PELLAGRA.

## Alabama Report for June, 1917.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		Alabama—Continued.	
Autauga County.....	3	Lauderdale County.....	3
Barbour County.....	1	Limestone County.....	2
Bullock County.....	2	Lee County.....	4
Butler County.....	1	Lowndes County.....	1
Calhoun County.....	2	Macon County.....	2
Chambers County.....	1	Madison County.....	14
Cherokee County.....	1	Marengo County.....	5
Choctaw County.....	2	Marshall County.....	1
Clarke County.....	1	Mobile County.....	39
Coffee County.....	1	Monroe County.....	1
Colbert County.....	1	Montgomery County.....	10
Conecuh County.....	1	Morgan County.....	1
Coosa County.....	1	Perry County.....	2
Dallas County.....	33	Pickens County.....	4
Dekalb County.....	1	Randolph County.....	1
Elmore County.....	2	Shelby County.....	2
Escambia County.....	1	St. Clair County.....	8
Etowah County.....	1	Sumter County.....	4
Fayette County.....	3	Talladega County.....	5
Geneva County.....	1	Tallapoosa County.....	3
Greene County.....	6	Tuscaloosa County.....	20
Hale County.....	5	Walker County.....	15
Henry County.....	1	Washington County.....	5
Houston County.....	1	Wilcox County.....	15
Jackson County.....	8	Winston County.....	1
Jefferson County.....	50	Total.....	303
Lamar County.....	4		

## City Reports for Week Ended July 21, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala.....	<sup>1</sup> 11	2	New Orleans, La.....	2	2
Columbia, S. C.....	1	1	New York, N. Y.....	1	1
Kalamazoo, Mich.....	1	1	Philadelphia, Pa.....	1	1
Lexington, Ky.....	1	1	Richmond, Va.....	2	1
Lynchburg, Va.....	2	1	Washington, D. C.....	3	1
Memphis, Tenn.....	2	1	Wichita, Kans.....	1	1
Mobile, Ala.....	1	1	Wilmington, N. C.....	1	1
Nashville, Tenn.....	7	1	Winston-Salem, N. C.....	1	1

<sup>1</sup> The reason that Birmingham had so many more cases of pellagra reported than any other city is not that the disease is more prevalent in Birmingham than in other cities of Alabama and neighboring States, but undoubtedly because of the successful efforts the health department has made in securing the cooperation of the practicing physicians in reporting cases.

## PNEUMONIA.

## City Reports for Week Ended July 21, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Boston, Mass.....	2	5	Grand Rapids, Mich.....	1	1
Braddock, Pa.....	2	1	Kalamazoo, Mich.....	1	1
Brookline, Mass.....	1	1	Los Angeles, Cal.....	1	1
Chelsea, Mass.....	1	1	Newark, N. J.....	11	6
Chicago, Ill.....	46	49	Philadelphia, Pa.....	16	9
Cleveland, Ohio.....	12	12	Quincy, Mass.....	1	1
Dayton, Ohio.....	2	1	Rochester, N. Y.....	5	2
Detroit, Mich.....	1	17	San Francisco, Cal.....	8	1
Erie, Pa.....	1	1	Springfield, Mass.....	1	1
Evansville, Ind.....	2	2	Worcester, Mass.....	4	1
Fort Worth, Tex.....	1	1			

## POLIOMYELITIS (INFANTILE PARALYSIS).

Cases Reported to the Public Health Service from June 1 to Aug. 8, 1917.

Place.	Period.	Cases.	Place.	Period.	Cases.
<b>Alabama:</b>			<b>Massachusetts—Con.</b>		
Cleburne County.....	June.....	1	Essex County—Con.		
Jefferson County.....			Haverhill.....	June.....	5
Birmingham.....	July 8-Aug. 4...	3	Do.....	July.....	10
St. Clair County.....	June.....	1	Do.....	Aug. 1-4.....	3
Ragland.....	July 15-21.....	1	Lawrence.....	July.....	2
<b>California:</b>			Lynn.....	do.....	5
Alameda County—			Do.....	Aug. 1-4.....	1
Berkeley.....	do.....	1	Salem.....	July.....	1
Los Angeles County—			Saugus (Town).....	do.....	2
Long Beach.....	June 3-9.....	1	<b>Hampden County—</b>		
Los Angeles.....	June 10-30.....	3	Springfield.....	June.....	1
Marin County—			Do.....	July.....	2
Belvedere.....	July 22-28.....	1	<b>Hampshire County—</b>		
San Francisco.....	July 29-Aug. 4...	1	Hadley.....	July.....	1
Santa Clara County...	July 22-28.....	1	<b>Middlesex County—</b>		
<b>Connecticut:</b>			Cambridge.....	June.....	2
New Haven County—			Groton (Town).....	July.....	1
Derby.....	July 15-21.....	1	Lowell.....	July.....	3
West Haven.....	do.....	1	Malden.....	July.....	1
Hartford County—			Medford.....	July.....	1
Bristol.....	do.....	1	Natick (Town).....	Aug. 1-4.....	1
New Britain.....	July 22-28.....	1	Stoneham (Town).....	do.....	1
Windham County—			<b>Norfolk County—</b>		
Thompson.....	July 15-21.....	1	Quincy.....	July.....	1
<b>Delaware:</b>			Weymouth.....	July.....	1
Kent County—			<b>Plymouth County—</b>		
Dover.....	July 24.....	1	Brockton.....	July.....	1
<b>Illinois:</b>			Do.....	Aug. 1-4.....	2
Adams County—			<b>Suffolk County—</b>		
Melrose Township.....	July 3-9.....	1	Boston.....	June.....	2
Cook County—			<b>Worcester County—</b>		
Chicago.....	June 10-Aug. 4...	12	Sutton.....	June.....	1
Wilmette.....	July 29-Aug. 4...	1	Worcester.....	do.....	3
Lake County—			Do.....	July.....	1
Zion City.....	July 3-9.....	1	Do.....	Aug. 1-4.....	1
Sangamon County—			<b>Michigan:</b>		
Springfield.....	June 3-9.....	1	Jackson County—		
Will County—			Jackson.....	July 29-Aug. 4...	1
Joliet.....	July 3-9.....	1	<b>Lenawee County—</b>		
<b>Indiana:</b>			Hudson Township.....	June.....	1
Elkhart County.....	June.....	2	<b>Washtenaw County—</b>		
Lake County.....	do.....	1	Ann Arbor.....	do.....	1
East Chicago.....	July 22-28.....	3	Do.....	July 8-14.....	1
Marion County.....	June.....	1	<b>Wayne County—</b>		
Wayne County.....	do.....	1	Detroit.....	do.....	1
<b>Iowa:</b>			<b>Minnesota:</b>		
Woodbury County—			Clay County—		
Sioux City.....	June 3-9.....	1	Keene Township.....	July 1-22.....	1
<b>Kansas:</b>			<b>Hennepin County—</b>		
Cloud County—			Minneapolis.....	July 1-21.....	1
Gasco R. D.....	June.....	1	<b>Lyon County—</b>		
Greenwood County—			Lyons Township.....	July 1-22.....	1
Fall River.....	July 23-29.....	1	<b>Pine County—</b>		
Lincoln County—			Windsor.....	June.....	1
Sylvan Grove.....			<b>Pope County—</b>		
R. D.....	June.....	1	Blue mounds.....	July 23-28.....	7
Wyandotte County—			<b>Township.....</b>		
Kansas City.....	June 24-July 28..	5	Langhei Town- ship.....	June.....	1
<b>Kentucky:</b>			Do.....	July 22-28.....	1
Kenton County—			<b>Washington County—</b>		
Covington.....	June 17-23.....	1	Stillwater.....	July 1-11.....	1
<b>Louisiana:</b>			<b>Watsonwan County—</b>		
Bienville Parish.....	June.....	1	Longlake Town- ship.....	July 1-22.....	1
<b>Maryland:</b>			<b>Wilkin County—</b>		
Allegany County.....	July 15-21.....	7	Bradford Town- ship.....	June.....	1
Do.....	July 22-Aug. 4...	8	<b>Mississippi:</b>		
Anne Arundel County.....	July 22-28.....	1	Amite County.....	do.....	5
Baltimore County.....	July 8-28.....	3	Chectaw County.....	do.....	1
Baltimore City.....	July 8-28.....	3	Kemper County.....	do.....	2
Dorchester County.....	July 1-7.....	1	Smith County.....	do.....	1
Garrett County.....	July 22-28.....	2	<b>Missouri:</b>		
Deer Park.....	June.....	1	Boone County—		
Jennings.....	do.....	1	Columbia.....	July 13.....	3
Worcester County.....	July 29-Aug. 4...	1	Callaway County—		
<b>Massachusetts:</b>			Fulton.....	Aug. 2.....	1
Essex County—					
Amesbury.....	June.....	1			
Beverly.....	July.....	2			
Groveland.....	July.....	3			

## POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

Cases Reported to the Public Health Service from June 1 to Aug. 8, 1917—Contd.

Place.	Period.	Cases.	Place.	Period.	Cases.
<b>Missouri—Continued.</b>			<b>Ohio—Continued.</b>		
Jackson County—			Stark County—		
Independence.....	July.....	1	Canton.....	July 22-28.....	1
Do.....	Aug. 2.....	1	Massillon.....	June.....	1
Kansas City.....	July 12-18.....	1	Summit County—		
St. Louis.....	June 17-23.....	1	Akron.....	do.....	4
<b>Montana:</b>			Do.....	July 1-21.....	4
Carbon County.....	June.....	1	Tuscarawas County—		
Cascade County.....	do.....	2	Uhrichsville.....	July 15-21.....	2
Custer County.....	do.....	1	Williams County.....	June.....	1
Granite County.....	do.....	2	<b>Pennsylvania:</b>		
<b>Nebraska:</b>			Allegheny County.....	do.....	3
Douglas County—			Pittsburgh.....	July 8-Aug. 4.....	5
Omaha.....	July 22-Aug. 4..	2	Bradford County.....	June.....	2
<b>New Hampshire:</b>			Butler County—		
Rockingham County—			Butler.....	July 29-Aug. 4..	1
Portsmouth.....	June 3-23.....	3	Cambria County.....	June.....	1
<b>New Jersey:</b>			Clearfield County.....	do.....	1
Bergen County.....	June.....	2	Dauphin County—		
Essex County.....	do.....	6	Harrisburg.....	July 8-14.....	1
Newark.....	July 8-21.....	2	Fayette County.....	June.....	2
Hudson County.....	June.....	3	Lancaster County.....	do.....	1
Hunterdon County.....	do.....	1	Lawrence County—		
Mercer County.....	do.....	2	New Castle.....	July 8-Aug. 4.....	6
Middlesex County.....	do.....	1	Montgomery County.....	June.....	1
Perth Amboy.....	July 8-14.....	1	Philadelphia County.....	do.....	1
<b>New York:</b>			Philadelphia.....	July 1-14.....	3
Albany County—			Schuylkill County.....	June.....	1
Albany.....	July 1-7.....	1	<b>Rhode Island:</b>		
Cayuga County—			Providence County—		
Auburn.....	June 17-23.....	1	Providence.....	July 15-21.....	1
Chautauqua County..	June.....	1	<b>South Carolina:</b>		
Dunkirk.....	July 22-28.....	1	Williamsburg County.....	June.....	1
Columbia County.....	June.....	1	<b>South Dakota:</b>		
Eric County—			Corson County.....	do.....	1
Buffalo.....	June 3-July 28..	6	<b>Vermont:</b>		
Jefferson County—			Chittenden County—		
Watertown.....	July 15-21.....	1	Bolton.....	July 22-28.....	1
<b>New York City.....</b>	June.....	32	Orange County.....	June.....	2
Do.....	July 1-7.....	5	Washington County.....	do.....	31
Do.....	July 8-14.....	5	Barre.....	July 15-Aug. 4..	6
Do.....	July 15-21.....	5	Barre (Town).....	July 8-14.....	1
Do.....	July 22-28.....	8	Duxbury.....	do.....	1
Do.....	July 29-Aug. 4..	12	East Montpelier.....	do.....	1
<b>Onondaga County—</b>			Fayston.....	July 7.....	1
Syracuse.....	July 22-Aug. 4..	2	Montpelier.....	July 8-21.....	9
Orange County.....	June.....	1	Waterbury.....	July 8-Aug 4.....	5
Saratoga County—			Worcester.....	July 8-14.....	2
Saratoga Springs..	July 29-Aug. 4..	1	Windsor County—		
Schenectady County..			Rochester.....	do.....	2
Schenectady.....	June 24-30.....	1	<b>Virginia:</b>		
Sullivan County.....	June.....	1	Albemarle County.....	July.....	1
Tompkins County.....	do.....	2	Alexandria County—		
Westchester County..	do.....	1	Theological Seminary.	July 14.....	1
<b>North Carolina:</b>			Goochland County....	July.....	1
Edgecombe County—			Henrico County—		
Rocky Mount.....	July 29-Aug. 4..	1	Richmond.....	July 8-21.....	3
<b>Ohio:</b>			King and Queen	July.....	2
Allen County—			County.....		
Lima.....	June 10-16.....	1	Louisa County.....	do.....	1
Belmont County—			Page County.....	do.....	3
Martins Ferry.....	Reported July 5..	11	Pittsylvania County..	do.....	2
Do.....	July 22-28.....	7	Rappahannock	do.....	4
Tease Township.....	Reported July 5..	6	County.....		
Cuyahoga County—			Rockingham County..	do.....	22
Cleveland.....	June.....	1	<b>Washington—</b>		
Do.....	July 8-Aug 3.....	8	King County—		
Franklin County—			Seattle.....	July 22-28.....	2
Columbus.....	June.....	1	<b>West Virginia:</b>		
Gallia County.....	do.....	1	Braxton County.....	July.....	9
Hamilton County—			Mapleton.....	July 22-28.....	1
Cincinnati.....	do.....	1	Gilmer County.....	July 29-Aug. 4..	2
Lucas County—			Jackson County.....	July 8-14.....	1
Toledo.....	do.....	1	Kenna.....	July 22-28.....	3
Montgomery.....	July 1-28.....	2	Lewis County.....	July 29-Aug. 4..	2
Dayton.....					
Pickaway County—					
Circleville.....	June.....	1			

**POLIOMYELITIS (INFANTILE PARALYSIS)**—Continued.**Cases Reported to the Public Health Service from June 1 to Aug. 8, 1917—Contd.**

Place.	Period.	Cases.	Place.	Period.	Cases.
<b>West Virginia—Contd.</b>			<b>West Virginia—Contd.</b>		
Marion County—			Upshur County.....	July 29-Aug. 4..	4
Annbell.....	July 22-28.....	1	Buckhannon.....	July 22-28.....	1
Fairmont.....	July 20.....	1	<b>Wisconsin:</b>		
Mamington.....	July 29-Aug. 4..	1	Dane County—		
Monongah (branch	July 8-Aug. 4..	16	Cottage Grove....	July 1.....	1
of Fairmont).			Juneau County.....	June.....	1
White Rock.....	July 22-28.....	1	La Crosse County....	do.....	1
Ohio County.....	July 8-14.....	1	Manitowoc County....	do.....	1
Wheeling.....	June 24-30.....	1	Milwaukee County....	do.....	1
Preston County—			Shawano County.....	do.....	1
Newburg.....	July 22-28.....	1	<b>Wyoming:</b>		
Tucker County—			Natrona County.....	do.....	1
Benbush.....	June.....	1			
Davis.....	July 22-28.....	2			

**State Reports for June, 1917.**

Place.	New cases reported.	Place.	New cases reported.
<b>Alabama:</b>		<b>New York—Continued.</b>	
Cleburne County.....	1	Columbia County.....	1
St. Clair County.....	1	Orange County.....	1
Total.....	2	Sullivan County.....	1
<b>New York:</b>		Tompkins County.....	2
Cayuga County.....	1	Westchester County....	1
Chautauqua County.....	1	New York City.....	32
		Total.....	40

**City Reports for Week Ended July 21, 1917.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	2		New Castle, Pa.....	1	
Berkeley, Cal.....	1		New York, N. Y.....	5	2
Birmingham, Ala.....	1		Northampton, Mass.....	1	
Cleveland, Ohio.....	1		Philadelphia, Pa.....		1
Dayton, Ohio.....	1		Providence, R. I.....	1	
Haverhill, Mass.....	2		Quincy, Mass.....	1	
Kansas City, Mo.....	1		Richmond, Va.....	1	
Lowell, Mass.....		1	Watertown, N. Y.....	1	
Minneapolis, Minn.....	1		Wilkes-Barre, Pa.....		1
Newark, N. J.....	1		Worcester, Mass.....	1	

**RABIES IN ANIMALS.****City Reports for Week Ended July 21, 1917.**

During the week ended July 21, 1917, 1 case of rabies in animals was reported at Covington, Ky., and 3 cases were reported at Detroit, Mich.

**SCARLET FEVER.**

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1288

## SMALLPOX.

## New York Report for June, 1917.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within seven years preceding attack.	Number last vaccinated more than seven years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
New York:						
Albany County.....	7	.....	1	1	5	.....
Dutchess County.....	1	.....	.....	.....	1	.....
Steuben County.....	1	.....	.....	.....	1	.....
Washington County.....	2	.....	1	.....	1	.....
New York City.....	3	.....	.....	.....	.....	3
Total.....	14	.....	2	1	8	3

## Alabama Report for June, 1917.

During the month of June, 1917, 6 cases of smallpox, with 1 death, were reported in Jackson County, Ala.

## City Reports for Week Ended July 21, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	1	.....	Kansas City, Kans.....	1	.....
Austin, Tex.....	1	.....	Kenosha, Wis.....	2	.....
Buffalo, N. Y.....	1	.....	Little Rock, Ark.....	3	.....
Butte, Mont.....	1	.....	Minneapolis, Minn.....	7	.....
Chicago, Ill.....	6	.....	New Orleans, La.....	4	.....
Cleveland, Ohio.....	9	.....	Oklahoma City, Okla.....	5	.....
Columbus, Ohio.....	2	.....	Omaha, Neb.....	9	.....
Davenport, Iowa.....	2	.....	Pontiac, Mich.....	1	.....
Dayton, Ohio.....	3	.....	Rocky Mount, N. C.....	1	.....
Denver, Colo.....	1	.....	St. Joseph, Mo.....	4	.....
Detroit, Mich.....	6	.....	St. Louis, Mo.....	5	.....
Duluth, Minn.....	2	3	Seattle, Wash.....	4	.....
Erie, Pa.....	1	.....	Sioux City, Iowa.....	5	.....
Evansville, Ind.....	1	.....	Steubenville, Ohio.....	1	.....
Flint, Mich.....	2	.....	Superior, Wis.....	2	.....
Hamilton, Ohio.....	2	.....	Wichita, Kans.....	1	.....
Indianapolis, Ind.....	2	.....	Worcester, Mass.....	1	.....

## TETANUS.

## City Reports for Week Ended July 21, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Allentown, Pa.....	1	1	Jackson, Mich.....	.....	1
Buffalo, N. Y.....	2	1	Lorain, Ohio.....	1	.....
Chicago, Ill.....	1	1	Los Angeles, Cal.....	1	.....
Columbus, Ohio.....	1	1	New York, N. Y.....	1	.....
Detroit, Mich.....	1	1			

## TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1288.

## TYPHOID FEVER.

## Tennessee—Chattanooga.

During the month of July, 1917, 22 cases of typhoid fever were notified at Chattanooga, Tenn.

## State Reports for June, 1917.

Place.	New cases reported.	Place.	New cases reported.
<b>Alabama:</b>		<b>Alabama—Continued.</b>	
Autauga County.....	1	Talladega County.....	4
Baldwin County.....	1	Tallapoosa County.....	1
Barbour County.....	1	Tuscaloosa County.....	24
Bibb County.....	2	Walker County.....	11
Blount County.....	3	Washington County.....	1
Bullock County.....	1	Wilcox County.....	1
Butler County.....	1		
Calhoun County.....	8	Total.....	313
Cherokee County.....	3		
Chilton County.....	7	<b>New York:</b>	
Choctaw County.....	4	Albany County.....	15
Clarke County.....	4	Allegany County.....	12
Coffee County.....	3	Broome County.....	1
Colbert County.....	1	Chautauqua County.....	4
Conecuh County.....	4	Chenango County.....	5
Coosa County.....	2	Clinton County.....	2
Covington County.....	1	Columbia County.....	3
Cullman County.....	3	Cortland County.....	1
Dale County.....	1	Dutchess County.....	3
Dallas County.....	20	Erie County.....	12
DeKalb County.....	3	Essex County.....	2
Elmore County.....	1	Franklin County.....	1
Escambia County.....	1	Fulton County.....	2
Etowah County.....	10	Genesee County.....	1
Franklin County.....	2	Greene County.....	4
Geneva County.....	1	Herkimer County.....	1
Greene County.....	1	Jefferson County.....	2
Hale County.....	2	Lewis County.....	1
Henry County.....	1	Montgomery County.....	1
Houston County.....	3	Niagara County.....	2
Jackson County.....	4	Oneida County.....	3
Jefferson County.....	87	Onondaga County.....	1
Lamar County.....	1	Orange County.....	1
Lauderdale County.....	7	Orleans County.....	1
Lawrence County.....	1	Otsego County.....	3
Limestone County.....	1	Rensselaer County.....	4
Macon County.....	7	Rockland County.....	2
Madison County.....	2	St. Lawrence County.....	5
Marengo County.....	6	Saratoga County.....	5
Marion County.....	3	Schenectady County.....	1
Marshall County.....	1	Schoharie County.....	1
Mobile County.....	21	Steuben County.....	2
Monroe County.....	4	Suffolk County.....	4
Montgomery County.....	6	Ulster County.....	2
Morgan County.....	2	Warren County.....	4
Pickens County.....	4	Wayne County.....	1
Pike County.....	1	Westchester County.....	5
Randolph County.....	5	Yates County.....	1
Shelby County.....	1	New York City.....	84
St. Clair County.....	10		
Sumter County.....	1	Total.....	205

## TYPHOID FEVER—Continued.

## City Reports for Week Ended July 21, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	1	.....	McKeesport, Pa.....	1	.....
Albany, N. Y.....	4	.....	Memphis, Tenn.....	.....	1
Baltimore, Md.....	8	2	Milwaukee, Wis.....	2	.....
Berkeley, Cal.....	2	.....	Minneapolis, Minn.....	3	.....
Birmingham, Ala.....	22	6	Mobile, Ala.....	.....	2
Boston, Mass.....	3	1	Morristown, N. J.....	1	2
Buffalo, N. Y.....	.....	2	Nashville, Tenn.....	40	1
Cambridge, Mass.....	1	.....	Newark, N. J.....	2	.....
Canton, Ohio.....	2	.....	New Bedford, Mass.....	1	.....
Charleston, S. C.....	4	.....	New Britain, Conn.....	1	.....
Chelsea, Mass.....	1	.....	New Haven, Conn.....	1	.....
Chicago, Ill.....	5	.....	New Orleans, La.....	40	3
Cincinnati, Ohio.....	1	.....	New York, N. Y.....	31	3
Cleveland, Ohio.....	1	.....	Norfolk, Va.....	4	.....
Coffeyville, Kans.....	5	.....	Norristown, Pa.....	2	.....
Columbia, S. C.....	3	1	Oakland, Cal.....	2	.....
Columbus, Ohio.....	5	.....	Oklahoma City, Okla.....	3	.....
Cumberland, Md.....	2	.....	Philadelphia, Pa.....	12	2
Dayton, Ohio.....	1	.....	Pittsburgh, Pa.....	.....	3
Detroit, Mich.....	9	2	Portland, Me.....	3	.....
Duluth, Minn.....	.....	1	Portland, Oreg.....	1	.....
East Orange, N. J.....	1	.....	Portsmouth, Va.....	1	.....
Elizabeth, N. J.....	1	1	Providence, R. I.....	6	.....
El Paso, Tex.....	.....	2	Reading, Pa.....	1	.....
Erie, Pa.....	1	.....	Richmond, Va.....	1	.....
Evansville, Ind.....	1	1	Roanoke, Va.....	4	2
Fall River, Mass.....	3	1	Rochester, N. Y.....	2	.....
Hart, Mich.....	1	.....	Rocky Mount, N. C.....	5	.....
Fort Worth, Tex.....	4	.....	St. Louis, Mo.....	8	3
Galveston, Tex.....	2	.....	San Francisco, Cal.....	7	.....
Hagerstown, Md.....	1	.....	Sacramento, Cal.....	4	.....
Harrisburg, Pa.....	2	.....	Seattle, Wash.....	2	1
Haverhill, Mass.....	1	.....	Somerville, Mass.....	1	.....
Hoboken, N. J.....	1	1	Syracuse, N. Y.....	1	.....
Indianapolis, Ind.....	2	.....	Toledo, Ohio.....	2	.....
Jonestown, Pa.....	1	.....	Trenton, N. J.....	1	.....
Kalamazoo, Mich.....	2	.....	Troy, N. Y.....	2	.....
Knoxville, Tenn.....	11	.....	Washington, D. C.....	5	1
Lancaster, Pa.....	2	.....	Wheeling, W. Va.....	.....	1
Little Rock, Ark.....	5	.....	Wichita, Kans.....	2	.....
Lorsin, Ohio.....	1	.....	Wilkinsburg, Pa.....	1	.....
Los Angeles, Cal.....	6	.....	Wilmington, Del.....	1	.....
Lowell, Mass.....	1	.....	Wilmington, N. C.....	.....	1
Lynchburg, Va.....	15	3	Winston-Salem, N. C.....	6	.....
Lynn, Mass.....	4	1	York, Pa.....	2	.....
Madison, Wis.....	2	.....			

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

## State Reports for June, 1917.

During the month of June, 1917, 21 cases of diphtheria, 525 cases of measles, and 37 cases of scarlet fever were reported in Alabama, and 1,571 cases of diphtheria, 9,384 cases of measles, and 1,070 cases of scarlet fever were reported in New York.

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS— Continued.

## City Reports for Week Ended July 21, 1917.

City.	Popula- tion as of July 1, 1916 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.	589,621	163	8	—	48	—	1	—	29	16
Boston, Mass.	756,476	184	59	4	74	5	16	—	74	28
Chicago, Ill.	2,497,722	618	148	18	108	2	114	8	270	68
Cleveland, Ohio.	674,073	175	38	4	19	—	2	—	38	—
Detroit, Mich.	571,784	181	60	5	11	—	39	—	35	15
Los Angeles, Cal.	503,812	—	8	—	21	—	6	—	62	19
New York, N. Y.	5,602,841	1,186	211	19	426	11	49	3	263	146
Philadelphia, Pa.	1,709,518	444	41	6	45	1	15	1	119	63
Pittsburgh, Pa.	579,090	182	—	—	1	—	—	—	—	5
St. Louis, Mo.	757,309	199	46	6	8	—	25	1	54	25
From 300,000 to 500,000 inhabit- ants:										
Buffalo, N. Y.	468,558	133	7	—	11	—	3	1	37	19
Cincinnati, Ohio.	410,476	98	8	—	3	—	4	—	24	18
Jersey City, N. J.	306,345	78	8	—	9	1	8	—	16	8
Milwaukee, Wis.	436,535	99	10	1	30	1	17	1	16	7
Minneapolis, Minn.	363,454	—	18	—	10	—	2	—	—	—
Newark, N. J.	408,894	108	11	—	22	—	8	—	25	26
New Orleans, La.	371,747	—	11	—	1	—	—	—	34	26
San Francisco, Cal.	463,516	136	11	1	28	1	4	1	20	16
Seattle, Wash.	348,639	40	—	—	10	—	—	—	15	4
Washington, D. C.	363,980	94	1	—	39	—	5	—	15	19
From 200,000 to 300,000 inhabit- ants:										
Columbus, Ohio.	214,878	61	6	—	—	—	1	—	5	4
Denver, Colo.	260,800	52	3	1	4	—	3	—	—	9
Indianapolis, Ind.	271,708	—	12	—	16	—	2	—	22	—
Kansas City, Mo.	297,847	—	1	—	2	—	8	1	8	11
Portland, Oreg.	295,463	45	—	—	1	—	5	—	5	3
Providence, R. I.	254,960	58	8	1	2	—	4	—	—	10
Rochester, N. Y.	256,417	57	7	1	54	1	12	—	9	3
From 100,000 to 200,000 inhabit- ants:										
Albany, N. Y.	104,199	—	—	—	14	—	2	—	1	—
Birmingham, Ala.	181,762	79	—	—	2	—	—	—	26	3
Bridgeport, Conn.	121,579	32	5	2	3	—	2	—	2	6
Cambridge, Mass.	112,981	27	3	—	2	—	—	—	7	1
Camden, N. J.	106,233	—	2	—	2	—	1	—	6	—
Dayton, Ohio.	127,224	31	1	—	7	—	6	—	4	3
Fall River, Mass.	128,366	23	4	—	6	—	1	—	14	—
Fort Worth, Tex.	104,562	20	—	—	—	—	1	—	3	—
Grand Rapids, Mich.	128,291	33	3	1	14	—	2	—	3	—
Hartford, Conn.	110,900	—	7	1	10	—	1	—	6	—
Lowell, Mass.	113,245	28	6	—	5	—	—	—	—	2
Lynn, Mass.	102,425	19	3	—	6	—	4	—	6	1
Memphis, Tenn.	148,995	—	—	—	—	—	—	—	—	11
Nashville, Tenn.	117,057	40	—	—	—	1	—	—	6	2
New Bedford, Mass.	118,158	26	—	—	10	—	1	—	16	1
New Haven, Conn.	149,685	—	1	—	5	—	1	—	5	5
Oakland, Cal.	198,604	37	—	—	—	—	2	—	5	2
Omaha, Nebr.	165,470	63	1	—	2	—	2	—	—	6
Reading, Pa.	109,381	23	8	—	2	—	2	—	—	2
Richmond, Va.	156,687	51	6	—	3	—	2	—	2	9
Springfield, Mass.	105,942	24	10	2	6	—	5	—	3	3
Syracuse, N. Y.	155,624	46	2	—	16	—	5	1	7	3
Tacoma, Wash.	112,770	—	1	—	1	—	2	—	—	—
Toledo, Ohio.	191,554	47	8	—	8	—	16	—	23	4
Trenton, N. J.	111,593	41	5	1	1	—	—	—	5	5
Worcester, Mass.	163,314	37	3	—	2	1	4	—	10	1
From 50,000 to 100,000 inhabit- ants:										
Akron, Ohio.	85,625	—	20	—	3	—	2	—	—	—
Allentown, Pa.	63,505	19	2	—	1	—	1	—	1	—
Atlantic City, N. J.	57,660	—	—	—	9	—	1	—	4	—
Bayonne, N. J.	69,893	—	1	—	—	—	2	—	1	—
Berkeley, Cal.	57,653	14	—	—	6	—	2	—	1	2
Binghamton, N. Y.	53,973	22	1	1	2	—	—	—	3	1
Brockton, Mass.	67,449	12	—	—	2	—	—	—	2	1
Canton, Ohio.	60,852	11	1	—	—	—	1	—	3	—
Charleston, S. C.	60,734	30	—	—	—	—	—	—	1	—

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS— Continued.

City Reports for Week Ended July 21, 1917—Continued.

City.	Popula- tion as of July 1, 1916 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 50,000 to 100,000 in- habitants—Continued.										
Covington, Ky.	57,144	24	2				1		1	8
Duluth, Minn.	94,495	24			18		7			
Elizabeth, N. J.	86,690	12	5		3		3		4	2
El Paso, Tex.	63,705	68								14
Erie, Pa.	75,195		8		2		6		6	12
Evansville, Ind.	76,078	23							2	2
Flint, Mich.	54,772	11	4		7		6			
Fort Wayne, Ind.	76,183	30	2							1
Harrisburg, Pa.	72,015	18	2		2		1		3	3
Hoboken, N. J.	77,214	16	2		8		1		3	2
Johnstown, Pa.	68,529	16	1				3		3	
Kansas City, Kans.	99,437		1						4	
Lancaster, Pa.	50,853				2					
Little Rock, Ark.	57,343	16							2	
Malden, Mass.	51,155	9	4		4					1
Manchester, N. H.	78,283	14	2		3		2			
Mobile, Ala.	58,221	18	1							1
New Britain, Conn.	53,794	9			2					
Norfolk, Va.	89,612									2
Oklahoma City, Okla.	92,943	17								3
Passaic, N. J.	71,744	26	10						2	2
Pawtucket, R. I.	59,411	19	4				1			1
Portland, Me.	63,867	17			17					
Rockford, Ill.	55,185	19	1		6		1		6	
Sacramento, Cal.	66,895	20	3	1	3					
Saginaw, Mich.	55,642	23			1		2			1
St. Joseph, Mo.	85,236	2	1						1	2
San Diego, Cal.	53,330	14			16	1	5		1	1
Savannah, Ga.	68,805	25			1				1	4
Schenectady, N. Y.	99,519	20	1		11				5	1
Sioux City, Iowa.	57,078						3			
Somerville, Mass.	87,039	16	2		4		1		1	1
South Bend, Ind.	68,946	12			2		1		1	2
Springfield, Ill.	61,120	14			15					2
Springfield, Ohio.	51,550	13			6		3		4	1
Terre Haute, Ind.	66,083	16	1				1		1	1
Troy, N. Y.	77,916			1	14		2		3	3
Wichita, Kans.	70,722				2		2		3	2
Wilkes Barre, Pa.	76,776	17	9		5		1		2	
Wilmington, Del.	94,265	50	1		1		2		5	
York, Pa.	51,656		1						1	
From 25,000 to 50,000 inhabitants:										
Alameda, Cal.	27,732	3								
Austin, Tex.	34,814	14								2
Bellingham, Wash.	32,985								2	2
Brookline, Mass.	32,730	9							1	
Butler, Pa.	27,632	2	3							
Butte, Mont.	43,425		1		1		4			
Chelsea, Mass.	46,192	14		1	4		1		4	1
Chicopee, Mass.	29,319	10	1	1	1				3	1
Columbia, S. C.	34,611	12	1		1		1		3	1
Cumberland, Md.	26,074	2			2					
Davenport, Iowa.	48,811		1							
Dubuque, Iowa.	39,873						1			2
East Orange, N. J.	42,458	3	2		15				2	
Elgin, Ill.	28,203	3	1							
Everett, Mass.	39,233	3	3		8				2	
Fitchburg, Mass.	41,781	9	2		2					1
Galveston, Tex.	41,863	9	8			1			1	
Green Bay, Wis.	29,353	9								
Hagerstown, Md.	25,679		1						1	
Hamilton, Ohio.	40,496	9							1	
Haverhill, Mass.	48,477	11	1		1				1	1
Jackson, Mich.	35,363	7			7				2	
Kalamazoo, Mich.	45,886	17	2		37				4	3
Kenosha, Wis.	31,576	8			3		3			
Knoxville, Tenn.	33,676		1				4			
La Crosse, Wis.	31,677	12	3							
Lexington, Ky.	41,097	21								3
Lima, Ohio.	35,384	5			1		1			
Lincoln, Nebr.	46,515	10	1							2
Long Beach, Cal.	27,587	8			2				1	

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS— Continued.

City Reports for Week Ended July 21, 1917—Continued.

City.	Popula- tion as of July 1, 1916 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.		
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
From 25,000 to 100,000 inhabit- ants—Continued.											
Lorain, Ohio.....	36,964		1				3		1	2	
Lynchburg, Va.....	32,940	14			1				1		
Madison, Wis.....	30,669						3		1		
McKeesport, Pa.....	47,521	16	4						1		
Montclair, N. J.....	26,318	6							2		
Nashua, N. H.....	27,327	9									
Newburgh, N. Y.....	29,605	5			6				2	1	
Newport, Ky.....	31,927	9									
Newport, R. I.....	30,108	7								1	
Newton, Mass.....	43,715	6	5	1	4						
Niagara Falls, N. Y.....	37,353	15	3		1				2	2	
Norristown, Pa.....	31,401	8	1							2	
Ogden, Utah.....	31,404	1					1		1		
Orange, N. J.....	33,080	17	1		5			1		2	
Pasadena, Cal.....	46,450	12							1	3	
Perth Amboy, N. J.....	41,185	11							1		
Pittsfield, Mass.....	38,629	10			7		1		4		
Portsmouth, Va.....	39,651	10			1					2	
Quincy, Ill.....	36,798	9									
Quincy, Mass.....	38,136	11	5		3		1		2		
Racine, Wis.....	46,486	12			1				1	3	
Roanoke, Va.....	43,284								1	2	
Rock Island, Ill.....	28,926	7	1								
San Jose, Cal.....	38,902				6		2		1		
Steubenville, Ohio.....	27,445	5							1		
Superior, Wis.....	46,226	10	2								
Taunton, Mass.....	36,283	3	1						3		
Topeka, Kans.....	48,726	3	1		1		2		1		
Waltham, Mass.....	30,570	14			1				2	3	
Watertown, N. Y.....	29,894				8		1		2		
West Hoboken, N. J.....	43,139	5			3		2		1	2	
Wheeling, W. Va.....	43,377	17					1				
Williamsport, Pa.....	33,809	1	9	1	2		1				
Wilmington, N. C.....	29,892	11	1						1		
Winston-Salem, N. C.....	31,155	17			1		1		2	3	
Zanesville, Ohio.....	30,863	7									
From 10,000 to 25,000 inhabit- ants:											
Alton, Ill.....	22,874	11									
Ann Arbor, Mich.....	15,010	12	2		9		3		1	1	
Braddock, Pa.....	21,685		3		1						
Cairo, Ill.....	15,794	5								1	
Clinton, Mass.....	13,075	6			1					2	
Concord, N. H.....	22,669	5	1		6		1				
Dunkirk, N. Y.....	20,743	4									
Galesburg, Ill.....	24,276	10	3		1						
Harrison, N. J.....	16,950				3						
Kearny, N. J.....	23,539	6	1		2				2		
Kokomo, Ind.....	20,930	4								3	
Long Branch, N. J.....	15,395	4									
Marquette, Wis.....	14,610	2			4						
Melrose, Mass.....	17,445	7	1								
Morristown, N. J.....	13,284	6									
Muscatine, Iowa.....	17,500				2						
Nanticoke, Pa.....	23,126	5					2				
Newburyport, Mass.....	15,243	1							2		
New London, Conn.....	20,985	10	3	1	3				1		
North Adams, Mass.....	12,019	5			8				1	1	
Northampton, Mass.....	19,926	6			2		3		2	4	
Plainfield, N. J.....	23,805	7							2		
Pontiac, Mich.....	17,524				1		4				
Portsmouth, N. H.....	11,666		1	1	2		1			1	
Rocky Mount, N. C.....	12,067	6									
Rutland, Vt.....	14,831	6	1		1		1				
Sandusky, Ohio.....	20,193	8									
Saratoga Springs, N. Y.....	13,821	5							1		
Steelton, Pa.....	15,548	6			2				4		
Washington, Pa.....	21,618				2		2				
Wilkesburg, Pa.....	23,228	6	2		1				1	1	

<sup>1</sup> Population Apr. 15, 1910; no estimate made.

## FOREIGN.

### CHINA.

#### Plague—Hongkong.

During the two weeks ended June 9, 1917, 5 cases of plague with 3 deaths were notified at Hongkong.

#### Plague-Infected Rats—Hongkong.

During the six weeks ended June 16, 1917, out of 11,339 rats examined at Hongkong, 14 were found plague infected. The last plague-infected rat at Hongkong was found during the week ended June 2, 1917.

### CUBA.

#### Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	July 1-10, 1917.		Remain- ing under treat- ment July 10, 1917.	Disease.	July 1-10, 1917.		Remain- ing under treat- ment July 10, 1917.
	New cases.	Deaths.			New cases.	Deaths.	
Diphtheria.....	4	.....	7	Measles.....	10	1	4
Leprosy.....	.....	.....	10	Typhoid fever.....	18	2	47
Malaria.....	8	.....	22				

### INDO-CHINA.

#### Cholera—Plague—Smallpox—February, 1917.

During the month of February, 1917, 20 cases of cholera, 101 cases of plague, and 593 cases of smallpox were notified in Indo-China. The cases were distributed by Provinces as follows:

*Cholera.*—Province of Anam, 3 cases; Cambodia, 8 cases; Cochin-China, 8 cases; Tonkin, 1 case.

*Plague.*—Province of Anam, 31 cases; Cambodia, 57 cases; Cochin-China, 13 cases.

*Smallpox.*—Province of Anam, 297 cases; Cambodia, 36 cases; Cochin-China, 193 cases; Tonkin, 67 cases.

Cholera showed a decrease in the month of February, 1917, as compared with the preceding month, only 20 cases being notified in

February, 1917, as against 52 in January, 1917. In January, 1916, 915 cases of cholera were reported, and in February, 1916, 417 cases.

The plague cases reported in February, 1917, exceeded the number reported for January, being 101 as compared with 82.

Smallpox increased considerably during the month of February, 1917, 593 cases being reported as compared with 174 in January. The prevalence was much greater than in the corresponding month of 1916, when 96 cases were reported. The greatest incidence during the month of February, 1917, was in Anam with 297 cases and Cochin-China with 193 cases.

#### UNION OF SOUTH AFRICA.

##### Plague—Orange Free State.

A fatal case of plague was reported May 28, 1917, in Winburg district, Orange Free State. The case occurred on Strydfontein farm.

#### CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

##### Reports Received During the Week Ended August 10, 1917.<sup>1</sup>

##### CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Madras.....	May 27-June 2....	1	1	
Rangoon.....	do.....	1		
Indo-China:				
Provinces.....				Feb. 1-28, 1917: Cases, 20; deaths, 12.
Anam.....	Feb. 1-28.....	3		
Cambodia.....	do.....	8	6	
Cochin-China.....	do.....	8	6	
Tonkin.....	do.....	1		
Philippine Islands:				
Manila.....	June 17-23.....	1		
Provinces.....				June 17-23, 1917: Cases, 142; deaths, 89.
Albay.....	June 17-23.....	27	18	
Batangas.....	do.....	1	1	
Bohol.....	do.....	29	26	
Capiz.....	do.....	35	19	
Cebu.....	do.....	31	19	
Sorsogon.....	do.....	19	6	

##### PLAGUE.

India:				
Bombay.....	June 3-9.....	36	33	
Karachi.....	do.....	57	52	
Madras Presidency.....	May 27-June 2....	9	12	
Rangoon.....	do.....	25	28	
Indo-China:				
Provinces.....				Feb. 1-28, 1917: Cases, 101; deaths, 71.
Anam.....	Feb. 1-28.....	31	15	
Cambodia.....	do.....	57	47	
Cochin-China.....	do.....	13	9	
Saigon.....	May 28-June 3....	20	11	
Siam:				
Bangkok.....	May 27-June 1....	1	1	
Straits Settlements:				
Singapore.....	June 3-9.....	1		
Union of South Africa:				
Orange Free State—				
Winburg district.....	May 28.....		1	

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—** Continued.

## **Reports Received During the Week Ended August 10, 1917—Continued.**

### **SMALLPOX.**

Place.	Date.	Cases.	Deaths.	Remarks.
Australia:				
New South Wales.....				May 27-June 21, 1917: Cases, 14.
Brewarrina.....	June 8-21.....	2		
Coonabarabran.....	May 25-June 7.....	12		
China:				Present.
Chungking.....	June 10-23.....			
Dairen.....	June 24-30.....	4		
Shanghai.....	June 25-July 1.....	1	5	
Tsingtao.....	June 12-July 7.....		2	
France:				
Paris.....	May 6-12.....	1		
India:				
Bombay.....	June 3-9.....	36	9	
Karachi.....	do.....	7		
Madras.....	May 27-June 2.....	13	3	
Rangoon.....	do.....	3		
Indo-China:				
Provinces.....				Feb. 1-28, 1917: Cases, 593; deaths 62.
Anam.....	Feb. 1-28.....	297	7	
Cambodia.....	do.....	36	1	
Cochin-China.....	do.....	193	53	
Tonkin.....	do.....	67	1	
Saigon.....	May 28-June 10.....	67	21	
Japan:				
Kobe.....	June 25-July 1.....	1		
Osaka.....	June 26-30.....	8	4	
Yokohama.....	June 25-July 1.....	1		
Mexico:				
Mazatlan.....	July 11-17.....		2	
Portugal:				
Lisbon.....	June 10-30.....	6		
Russia:				
Petrograd.....	May 13-19.....	28		
Riga.....	May 6-12.....	1		
Venezuela:				
Maracaibo.....	July 2-8.....		3	

### **TYPHUS FEVER.**

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers.....	June 1-30.....	5	3	
China:				
Antung.....	June 25-July 1.....	3		
Tsin ta.....	June 17-July 7.....	2		
Russia:				
Petrograd.....	May 13-19.....	14		
Riga.....	May 6-12.....	1		
Switzerland:				
Basel.....	June 17-23.....	1		
Tunisia:				
Tunis.....	June 30-July 6.....		1	

## **Reports Received from June 30 to Aug. 3, 1917.**

### **CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bassein.....	Apr. 1-May 5.....		8	
Calcutta.....	Apr. 29-May 26.....		273	
Madras.....	Apr. 22-28.....	1	1	
Mandalay.....	May 6-12.....		1	
Moulmein.....	May 13-19.....		2	
Pakokku.....	Apr. 29-May 5.....		1	
Rangoon.....	Apr. 21-May 19.....	30	15	
Indo-China:				
Saigon.....	Apr. 23-May 27.....	163	108	
Java:				
East Java.....	Apr. 2-8.....	1		
West Java.....				Apr. 13-19, 1917: 1 case.
Batavia.....	Apr. 13-19.....	1		

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—** Continued.

**Reports Received from June 30 to Aug. 3, 1917—Continued.**

## **CHOLERA—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Persia:				
Mazanderan Province—				
Amir Kela.....	Feb. 3.....	1		
Barfourouche.....	Jan. 15-17.....	4		
Harze Kela.....	Jan. 17.....	1		
Mechidessar.....	Jan. 31.....	3		
Philippine Islands:				
Provinces.....				May 20-June 16, 1917: Cases, 653; deaths, 417.
Albay.....	May 20-June 16.....	77	52	
Ambos Camarines.....	June 3-9.....	2	1	
Bohol.....	May 20-June 16.....	251	163	
Capiz.....	June 3-16.....	4	4	
Cebu.....	do.....	142	90	
Leyte.....	June 10-16.....	6	2	
Sorsogon.....	June 3-16.....	117	59	
Tayabas.....	do.....	3	3	

## **PLAGUE.**

Arabia:				
Aden.....	May 3-June 11.....		38	Apr. 8-May 14, 1917: Cases, 69; deaths, 51.
Ceylon:				
Colombo.....	Apr. 8-May 19.....	39	32	
China:				
Amoy.....	Apr. 29-May 5.....			Present and in vicinity.
Hongkong.....	May 13-June 9.....	13	8	
Kwangtung Province—				
Ta-pu district.....	June 2.....			Present.
Egypt:				Jan. 1-May 17, 1917: Cases, 231; deaths, 116.
Suez.....	May 12-17.....	4	2	
Provinces.....				
Fayoum.....	May 11-17.....	12	6	
Girgeh.....	May 17.....		1	
Minieh.....	May 12-15.....	2	2	
Siout.....	May 12.....	3	1	
Great Britain:				
London.....	May 3-8.....	2		2 in hospital at port. From s. s. Sardinia from Australian and oriental ports.
India:				Apr. 15-May 26, 1917: Cases, 34,545; deaths, 23,036.
Bassein.....	Apr. 1-May 19.....		39	
Bombay.....	Apr. 22-June 2.....	343	297	
Calcutta.....	Apr. 29-May 26.....		37	
Benazada.....	Apr. 1-May 19.....		33	
Karachi.....	Apr. 22-May 26.....	460	411	
Madras Presidency.....	do.....	210	171	
Mandalay.....	Apr. 8-May 12.....		9	
Moulmein.....	Apr. 1-May 12.....		32	
Myingyan.....	Apr. 1-7.....		1	
Rangoon.....	Apr. 15-May 19.....	115	110	
Toungoo.....	Apr. 8-14.....		2	
Indo-China:				
Saigon.....	Apr. 23-May 27.....	27	15	
Java:				
East Java.....				Apr. 2-22, 1917: Cases, 18; deaths, 18.
Surabaya.....	Apr. 2-22.....	13	13	
Surakarta.....	do.....	5	5	
Peru:				May 16-31, 1917: Cases, 15.
Departments—				
Arequipa.....	May 16-31.....	4		At Mollendo.
Callao.....	do.....	1		At Callao.
Lambayeque.....	do.....	2		At Chiclayo.
Libertad.....	do.....	7		At Salaverry, San Pedro, and Trujillo.
Lima.....	do.....	1		At Lima.
Siam:				
Bangkok.....	Apr. 22-May 26.....	11	10	
Union of South Africa:				
Cape of Good Hope State—				
Queenstown.....	June 6.....	1		
Orange Free State.....				Apr. 16-22, 1917: 1 case; Apr. 9-22, 1917: Cases, 26; deaths, 17.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—** Continued.

Reports Received from June 30 to Aug. 3, 1917—Continued.

## **SMALLPOX.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Australia:</b>				
New South Wales.....				Apr. 27-May 10, 1917: Cases, 6.
Brewarrina.....	Apr. 27-May 10...	4		
Quambone.....	do.....	2		
Queensland—				
Thursday Island Quarantine Station.	May 9.....	1		From s. s. St. Albans from Kobe via Hongkong. Vessel proceeded to Townsville, Brisbane, and Sydney, in quarantine.
<b>Brazil:</b>				
Bahia.....	May 6-12.....	1		
Rio de Janeiro.....	May 6-June 16...	78	16	
<b>Canada:</b>				
Manitoba—				
Winnipeg.....	June 10-16.....	1		
Nova Scotia—				
Halifax.....	June 18-July 7...	3		
Port Hawkesbury.....	June 17-30.....			Present in district.
<b>Ceylon:</b>				
Colombo.....	May 6-12.....	1		
<b>China:</b>				
Amoy.....	Apr. 29-May 26...			Present and in vicinity.
Antung.....	May 21-June 24...	4		
Chungking.....	May 6-June 2.....			Present.
Changsha.....	May 27-June 2.....	5		
Dairen.....	May 13-June 23...	26	4	
Harbin.....	Apr. 23-May 6.....	7		On Chinese Eastern Ry.
Hongkong.....	May 6-June 16.....	8	7	
Manchuria Station.....	Apr. 23-29.....	1		Do.
Mukden.....	May 27-June 2.....			Present.
Shanghai.....	May 21-June 24...	12	27	Cases foreign; deaths among natives.
Tientsin.....	May 13-June 9.....	12		
Tsitsihar Station.....	Apr. 16-22.....	1		On Chinese Eastern Ry.
Tsingtao.....	May 22-June 16...	35	5	At another station on railway, 1 case.
<b>Egypt:</b>				
Alexandria.....	Apr. 30-June 10...	33	7	
<b>Germany.</b>				
Berlin.....	Mar. 18-Apr. 28...	106		Mar. 18-Apr. 28, 1917: Cases, 715 in cities and 32 States and districts.
Bremen.....	do.....	16		
Charlottenburg.....	do.....	18		
Hamburg.....	do.....	50		
Leipzig.....	do.....	20		
Lübeck.....	do.....	2		
Munich.....	do.....	10		
Stuttgart.....	do.....	1		
<b>India:</b>				
Bombay.....	Apr. 22-June 2.....	88	34	
Calcutta.....	Apr. 29-May 26...		12	
Karachi.....	Apr. 22-May 19...	13	5	
Madras.....	Apr. 22-May 26...	56	35	
Rangoon.....	Apr. 15-May 26...	25	4	
<b>Indo-China:</b>				
Saigon.....	Apr. 23-May 27...	132	42	
<b>Italy:</b>				
Turin.....	May 21-June 24...	32	12	
<b>Japan:</b>				
Kobe.....	May 27-June 24...	52	15	
Nagasaki.....	May 28-June 3.....	1		
Osaka.....	May 16-June 10...	161	55	
Yokohama.....	May 27-June 1.....		1	
<b>Java:</b>				
East Java.....	Apr. 2-29.....	11	1	
Mid-Java.....	Apr. 1-21.....	16		
West Java.....				Apr. 13-May 10, 1917: Cases, 46; deaths, 7.
Batavia.....	Apr. 13-May 3.....	11	2	
<b>Mexico:</b>				
Mexico City.....	June 3-30.....	162		
Monterey.....	June 18-24.....		24	
<b>Philippine Islands:</b>				
Manila.....	May 13-June 9.....	6		Varioloid.
<b>Portugal:</b>				
Lisbon.....	do.....	8		
<b>Portuguese East Africa:</b>				
Lourenço Marquez.....	Mar. 1-31.....		1	

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—** Continued.

## **Reports Received from June 30 to Aug. 3, 1917—Continued.**

### **SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Archangel.....	May 1-14.....	7	2	
Petrograd.....	Feb. 18-May 12.....	331		
Riga.....	Mar. 11-May 19.....	3		Jan. 1-31, 1917: Cases, 7.
Vladivostok.....	Mar. 15-21.....	23	7	
Spain:				
Madrid.....	May 1-31.....		3	
Seville.....	do.....		5	
Valencia.....	June 3-23.....	3		
Straits Settlements:				
Penang.....	Mar. 18-May 12.....	5	2	
Sweden:				
Malmö.....	Apr. 22-28.....	1		
Stockholm.....	May 20-June 2.....	1	1	
Tunisia:				
Tunis.....	June 2-8.....	2		
Turkey in Asia:				
Trebizond.....	Feb. 25-Apr. 13.....		15	
Union of South Africa:				
Johannesburg.....	Mar. 12-24.....	4		
Venezuela:				
Maracaibo.....	June 18-July 1.....		5	

### **TYPHUS FEVER.**

Austria-Hungary:				
Austria.....				Oct. 22-Dec. 17, 1916: Cases, 2,371.
Bohemia.....	Oct. 22-Dec. 17.....	634		
Galicia.....	do.....	809		
Lower Austria.....	do.....	47		
Moravia.....	do.....	617		
Silesia.....	do.....	16		
Styria.....	do.....	243		
Upper Austria.....	do.....	5		
Hungary.....				Feb. 19-Mar. 25, 1917: Cases, 1,381.
Budapest.....	Feb. 19-Mar. 25.....	83		
China:				
Hankow.....	June 9-16.....	1		
Tsingtao.....	May 30-June 9.....	2		
Egypt:				
Alexandria.....	Apr. 30-June 10.....	1,421	413	
Great Britain:				
Cork.....	June 17-23.....		1	
Greece:				
Saloniki.....	May 13-16.....		26	
Japan:				
Nagasaki.....	June 11-24.....	4		
Java:				
Mid-Java.....	Apr. 1-30.....	7	2	
West Java.....				Apr. 13-May 10, 1917: Cases, 86.
Batavia.....	Apr. 13-May 10.....	22		
Mexico:				
Mexico City.....	June 3-30.....	431		
Netherlands:				
Rotterdam.....	June 9-23.....	3	2	
Portuguese East Africa:				
Lourenço Marquez.....	Mar. 1-31.....	1		
Russia:				
Archangel.....	May 1-14.....	2		
Petrograd.....	Feb. 18-May 18.....	84	3	
Riga.....	Jan. 1-31.....	1		
Vladivostok.....	Mar. 29-May 21.....	5		
Spain:				
Madrid.....	May 1-31.....		2	

### **YELLOW FEVER.**

Mexico:				
Yucatan, State—				
Peto.....	June 23.....	1	1	In person recently arrived from Mexico City.